RAILROAD

MAGAZINE | APRIL 50c

Canadian Pacific streamliner winds along the Bow River in Alberta

NOW! Give Yourself a $168-a-Month Raise!

We'll start you in a proven money-earning spare-time business at no cost to you!

SEND FOR *FREE* BUSINESS KIT!

Here's a business for you that will be as much fun as it is profitable... and you don't have to invest one cent...ever! We've helped thousands of men succeed in this unique business...and we'd like to do it for **you**, too. Just 2 orders a day from friends, neighbors, relatives, in "off hours" earns you $168 EXTRA a month! James Kelly of Ohio took so many orders for these Nationally-Advertised shoes that he made $93.55 in just ONE evening! Fred Mapes of California regularly makes $5 to $10 every hour he devotes to his Mason Shoe business! There is no limit on what you can earn!

It's **easy** with our way of selling shoes. We set you up in a complete "shoe store" business you can run from your home. **We** carry the stock and ship the shoes. All you do is show the styles to your family, friends, people where you work, etc....and take orders. You have a profitable business with no rent, light bill, clerk hire or other costs to worry you. **You keep 100% of your profit!**

Here's why you'll make money!

● You offer **170** comfortable fast-selling styles...far more than a store! ● You have an amazing range of **sizes (2½ to 14)** and **widths (AAAA to EEEE)**. Even hard-to-fit people can buy from you! ● Because we carry over 200,000 pairs in stock, your customers get **exactly** what they want ...no misfits or substitutions! ● You feature exclusive Velvet-eez shoes with foamy-soft **air-cushion innersoles** that let you "walk on air." Built for supreme comfort, Mason shoes also feature built-in strong steel shanks, Air-Cushion longitudinal support, Nylon stitching. Advertised in Esquire, Good Housekeeping and on TV, they'll be available **only** from **you**—not sold in stores! ● You save your customers money, and the time they would waste "shopping around" shoe stores.

Take Orders For Over 170 Dress-Sport-Work Shoe Styles!

30 kinds of work shoes! A style for every trade! Special Neoprene, Cork, Cushion soles, heels...ventilated work shoes...even Safety Toe Shoes!

Smart dress, sport styles! The last word in styling! Many fine, unusual leathers. Cool Nylon Mesh styles, moccasins, 2-tones and Cush-N-Crepe soled shoes!

70 Styles for Women! Satisfy almost every taste! Many comfort features. Low-heeled, high-heeled, casuals, service shoes, latest styles!

No wonder you'll have the biggest and best "shoe store" business in town!

MASON SHOE MFG. CO.
Since 1904
Desk MA598, Chippewa Falls, Wisconsin

You'll get a Starting Kit *FREE!*

As soon as we receive the coupon below we'll send you a complete Business Outfit **FREE and postpaid!** It features the entire Mason Collection in full color; contains 10-second Air Cushion demonstrator, valuable Booklet chock full of how-to-make-money hints, special Measuring Board, advertising reprints...everything else you need to start making cash profits from the first hour! We'll also show you how to earn monthly **Bonus Checks** and win costly prizes **Free!**

Mason Shoes will be available ONLY from You!

Because Mason Shoes are not sold in stores, you get **repeat** orders from delighted customers almost automatically! Steady cash profits every month! Since everyone you know wears shoes...**EVERYBODY IS A PROSPECT!** No wonder this is the perfect "off-hours" business: a quality product everybody needs... backed by the famous Good Housekeeping Guarantee Seal...one you can take orders for 12 months of the year. Want to see how much money **you** can make? For a 2¢ postcard you can try it NOW...start your exciting business **right away!**

RUSH THIS STAMP FOR YOUR *FREE* BUSINESS OUTFIT!

Mr. Ned Mason, Vice President
Mason Shoe Mfg. Co., Desk MA-598
Chippewa Falls, Wisconsin

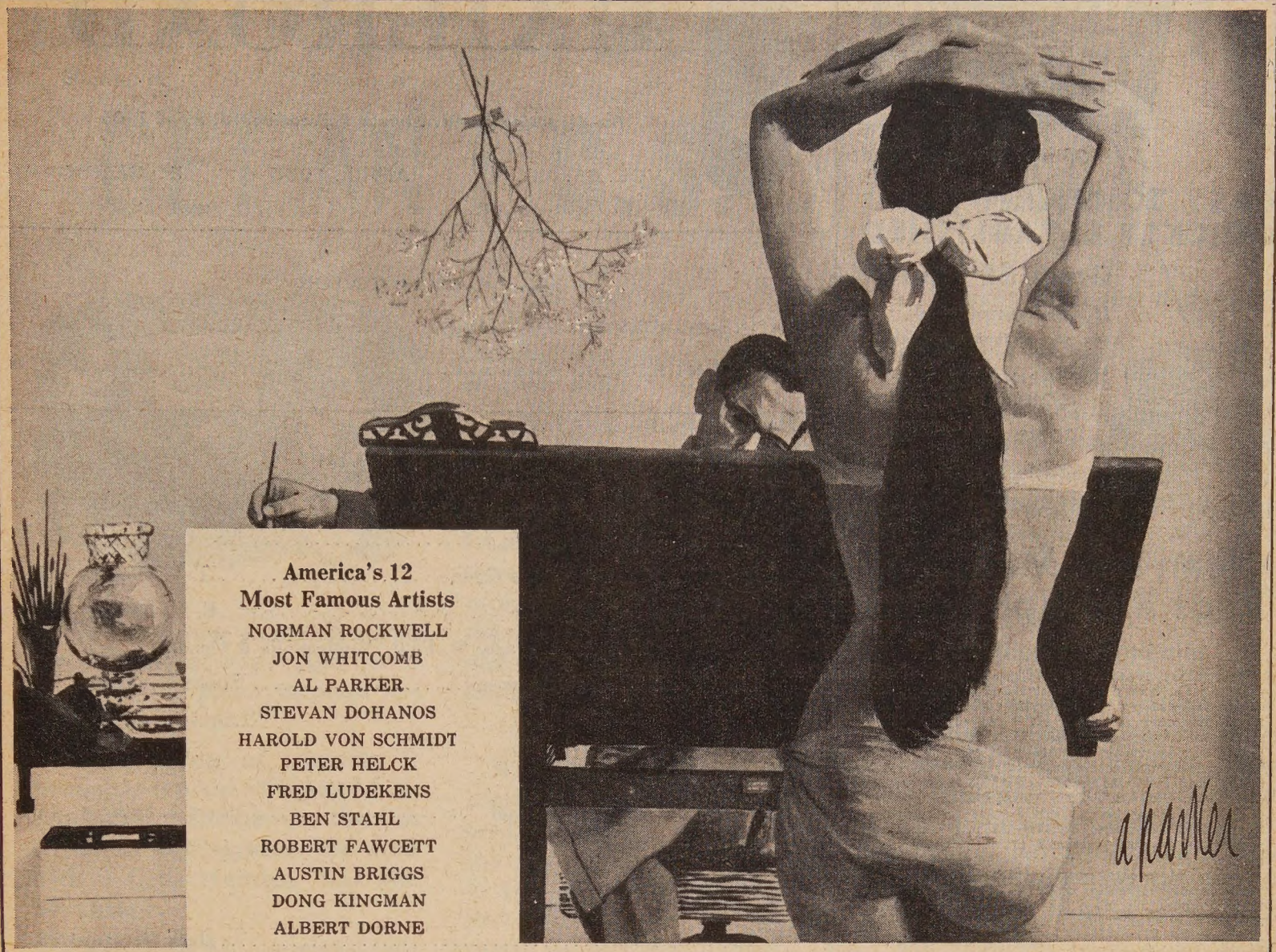
Yes, I'd like to give myself a $168 a month raise! Please set me up as your man in my community by rushing my Complete Starting Shoe Business Outfit FREE and postpaid so I can start making extra money from my first hour!

Name_____

Address_____

Town_____ State_____

Courtesy Maxwell Offset



America's 12
Most Famous Artists
NORMAN ROCKWELL
JON WHITCOMB
AL PARKER
STEVAN DOHANOS
HAROLD VON SCHMIDT
PETER HELCK
FRED LUDEKENS
BEN STAHL
ROBERT FAWCETT
AUSTIN BRIGGS
DONG KINGMAN
ALBERT DORNE

"WE'RE LOOKING FOR PEOPLE WHO LIKE TO DRAW," say America's 12 Most Famous Artists. Many men and women have hidden art talent they never dreamed of. They could be trained for success and security in the field of art if they only knew their own ability. We artists will help you discover your art talent free! Just send for our **FREE ART TALENT TEST.**

Thousands paid $1 to take this revealing 8-page test. It's yours FREE if you act at once. Mail the coupon NOW!

FAMOUS ARTISTS SCHOOLS
Studio 8-MA, Westport, Conn.

Send me without obligation your Famous Artists Talent Test.

Mr.
Mrs. _____ Age _____
Miss (PLEASE PRINT)

Address _____

City _____ Zone ____ State _____

Operate YOUR OWN Business

25th Anniversary Year

EASY TO LEARN QUICKLY ESTABLISHED

Gross $5 hourly!

If now employed:

you can profitably operate part time while building a full time business . . . with servicemen.

increase your income . . . be your own boss. We'll Help Finance You

Clean and Mothproof Rugs and Upholstery

. . . this modern convenient way

If you are reliable and diligent, we'll establish you in a Duraclean service dealership. A Duraclean dealer will train and assist you right in your own town. It's easy to learn. He'll reveal his proven, successful methods and sales plan. He'll *work with you.* Your dealership becomes part of a 25-year-old world-wide organization built upon REPEAT ORDERS and RECOMMENDATIONS from satisfied customers. Our MUTUAL ASSISTANCE program gives you many unique advantages **after** you are established. We offer substantial and continuous assistance as your business grows. Coupon gives details.

While increasing your income, you have the freedom and prestige of YOUR OWN business. Alert dealers can earn $5 gross hourly profit on service they render *plus* $3 on EACH service man at National Price Guide charges. We help finance honest, reliable men.

Duraclean cleans by absorption! Aerated foam absorbs the dirt holding it in suspension until sponged away. It eliminates harsh, machine scrubbing, soaking, and shrinkage. Dirt, grease and many unsightly spots vanish as if by magic. Wool fibers come to life . . . matted pile rises . . . colors revive. Upholstery and floor covering look newer, last longer.

Duraproof, another year 'round service kills moths and carpet beetles, and makes materials resistant to both. ***Duraproof*** is the only moth-proof service backed by an International Money Back 6 YEAR WARRANTY.

Upholstery and floor coverings are serviced "in the home," office or public buildings. Customers like this convenience of not having furnishings marred in trucks and out of use for days or weeks. Almost every building houses a potential customer needing one or both modern services.

Nationally Advertised. Your services are advertised in magazines such as Life, McCalls, House Beautiful, House and Garden, New Yorker, Ladies Home Journal, etc., to help create customers for you . . . to explain the superior methods of YOUR modern service . . . and to develop customer confidence in YOUR business.

Portable equipment . . . no shop needed. Some dealers establish a shop or office as their business grows. Start full or part time. It's easy to learn . . . quickly established.

FREE Booklet! Send for it.

If you are interested in an opportunity like this, fill out the coupon today! A letter and 16 page illustrated booklet will explain everything. We furnish electric machines, advertising matter, store cards, introduction slips, sales book, demonstrators and enough materials to return your TOTAL investment. You can have YOUR OWN business operating within a few days. Mail coupon NOW —get the facts, then decide. No obligation. Easy Terms!

"OWN a Business" Coupon

Duraclean Co., 5-703 Duraclean Bldg., Deerfield, Ill.

Without obligation to me, send booklet and letter giving full details. Tell me how I may OWN a growing business of my own built upon satisfied customers.

Name .....

Address .....

City ..... State .....

RAILROAD MAGAZINE

The Magazine of Adventurous Railroading—Founded 1906

VOL. 66, NO. 2 APRIL, 1955 50 CENTS

Freeman H. Hubbard, EDITOR

MANAGING EDITOR: *H. James Cook* ART DIRECTOR: *Bernard White*

ASSISTANT EDITOR: *Barbara Kreimer* ART EDITOR: *Morton Mace*

ILLUSTRATED FEATURES

Railroading With Rittase.....Photos of the Month 10

His Name Is a Locomotive.....The Diesel Story 18

The Steam-Turbine Makes Good.....I. N. Moseley 26

Ride Down Memory Lane.....E. Jay Quinby 29

Locomotives of the Chicago, St. Paul, Minneapolis & Omaha 41

Slow Train Through Arkansaw.....Stuart Covington 54

TRUE TALE

The Curse of Alpine Tunnel.....Gilbert A. Lathrop 48

FICTION

The Long Road.....Jack Deragon 38

SHORT HAULS

Can You Pick a Title for This Photo?..... 8

Journey's End 40

When the *Cannon Balls* Met..... 44

DEPARTMENTS

Mail Car 4

Information Booth 32

Transit Topics 46

Books of the Rails..... 52

Along the Iron Pike..... 58

Railroad Hobby Club..... 76

HENRY STEEGER, *Publisher*

THOMAS HARRAGAN, *Associate Publisher* IRA MOSHIER, *Newsstand Sales Mgr.*

P. J. GLEASON, *Production Mgr.* JOSEPH MUCCIGROSSO, *Subscription Mgr.*

ADV. REPRESENTATIVES

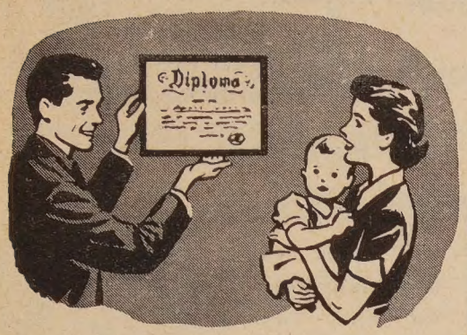
Wilson & Stark, 40 East 50th St., New York, N. Y.
Harley L. Ward, Inc., 360 North Michigan Ave., Chicago, Ill.
Houston & Walsh, 435 South La Cienega Blvd., Los Angeles, Calif.

Change of Address: Postmaster—Please mail Form 3579 notices to Railroad Magazine, 205 East 42nd Street, New York 17, N. Y. Published monthly by Popular Publications, Inc., at McCall Street, Dayton 1, Ohio. Editorial and executive offices, 205 East 42nd Street, New York 17, N. Y. Henry Steeger, President, John J. McVarish, Treasurer. Entered as second-class matter at Post Office in Dayton, Ohio.

Copyright 1955, by Popular Publications, Inc., this issue is published simultaneously in Dominion of Canada. Copyright under International Copyright Convention and Pan-American Copyright Conventions. All rights reserved, including right of reproduction, in whole or part, in any form.

Title registered in U. S. Patent Office. Single copy, 50c. Annual subscription for U. S. A., its dependencies, and Canada, $5.00. Other countries, $1.00 additional. When submitting manuscripts, enclose stamped, self-addressed envelope for return, if found unacceptable. Publishers exercise care in handling unsolicited manuscripts, but assume no responsibility for return. Printed in U. S. A.

FOR REAL **JOB SECURITY** —GET AN **I.C.S.** DIPLOMA



"You can stop worrying, Jane. My job's secure now! And here's the insurance policy to prove it—my I.C.S. diploma!"

This feeling of security is probably typical of every I.C.S. graduate. Because—as the job situation gets tighter, the man with I.C.S. training has the advantage.

Why? Your I.C.S. diploma tells your present employer three important things: (1) You want to make the most of your present job. (2) You have the training you need for advancement. (3) You look for better ways of doing things *on your own.*

What you do about your future is up to *you.* Do nothing and stay at your present job at the same old pay. Or earn an I.C.S. diploma in your spare time for *security, promotions, more pay!* Your first step is to mark the course that interests you in the coupon below, and mail it to us.

Free books

We'll send you two interesting books. The first, "How to Succeed," is a gold mine of helpful tips. Points out many small things in your personality and behavior that can make the difference between success and failure. The second book tells you about the opportunities in the field of your choice. Also, free sample lesson.

Costs *pennies* a day

Many an I.C.S. student has made up the cost of his course in one month with the salary increase his I.C.S. training earned for him. By studying at home in your spare time, you pay yourself many times an hour more than you're now making. (One student reports—"My I.C.S. course was worth $95 an hour to me.")

The security of your present job—or the success in finding the new job you've always wanted—is in *your* hands. Move ahead with I. C. S. training while others stay behind on the routine, small-pay jobs. Remember, your first step to security and success is to mail this coupon. Take a few minutes and do it *now.* If you put it off, it can cost you your future.

For Real Job Security—Get an I. C. S. Diploma!—Easy Pay Plan—I. C. S., Scranton 9, Penna.

INTERNATIONAL CORRESPONDENCE SCHOOLS ICS

BOX 81098B, SCRANTON 9, PENNA. (Partial list of 277 courses)

Without cost or obligation, send me "HOW to SUCCEED" and the opportunity booklet about the field BEFORE which I have marked X (plus sample lesson):

ARCHITECTURE and BUILDING CONSTRUCTION
- ☐ Air Conditioning—Refrig.
- ☐ Architecture
- ☐ Architectural Interior
- ☐ Building Contractor
- ☐ Building Maintenance
- ☐ Carpenter and Mill Work
- ☐ Estimating
- ☐ Heating
- ☐ Painting Contractor
- ☐ Plumbing
- ☐ Reading Arch. Blueprints

ART
- ☐ Cartooning
- ☐ Commercial Art
- ☐ Fashion Illustrating
- ☐ Magazine Illustrating
- ☐ Show Card and Sign Lettering
- ☐ Sketching and Painting

AUTOMOTIVE
- ☐ Auto Body Rebuilding
- ☐ Auto Elec. Technician
- ☐ Auto-Engine Tune Up
- ☐ Automobile Mechanic

AVIATION
- ☐ Aeronautical Engineering Jr.
- ☐ Aircraft & Engine Mechanic

BUSINESS
- ☐ Advertising
- ☐ Bookkeeping and Accounting
- ☐ Business Administration
- ☐ Business Correspondence
- ☐ Public Accounting
- ☐ Creative Salesmanship
- ☐ Federal Tax
- ☐ Letter-writing Improvement
- ☐ Office Management
- ☐ Professional Secretary
- ☐ Retail Business Management
- ☐ Sales Management
- ☐ Stenographic-Secretarial
- ☐ Traffic Management

CHEMISTRY
- ☐ Analytical Chemistry
- ☐ Chemical Engineering
- ☐ Chem. Lab. Technician
- ☐ General Chemistry
- ☐ Natural Gas Prod. & Trans.
- ☐ Petroleum Engineering
- ☐ Plastics
- ☐ Pulp and Paper Making

CIVIL, STRUCTURAL ENGINEERING
- ☐ Civil Engineering
- ☐ Construction Engineering
- ☐ Highway Engineering
- ☐ Reading Struct. Blueprints
- ☐ Sanitary Engineering
- ☐ Structural Engineering
- ☐ Surveying and Mapping

DRAFTING
- ☐ Aircraft Drafting
- ☐ Architectural Drafting
- ☐ Electrical Drafting
- ☐ Mechanical Drafting
- ☐ Mine Surveying and Mapping
- ☐ Plumbing Drawing and Estimating
- ☐ Structural Drafting

ELECTRICAL
- ☐ Electrical Engineering
- ☐ Electrical Maintenance
- ☐ Electrician ☐ Contracting
- ☐ Lineman

HIGH SCHOOL
- ☐ Commercial ☐ Good English
- ☐ High School Subjects
- ☐ Mathematics

LEADERSHIP
- ☐ Foremanship
- ☐ Industrial Supervision
- ☐ Leadership and Organization
- ☐ Personnel-Labor Relations

MECHANICAL AND SHOP
- ☐ Gas—Electric Welding
- ☐ Heat Treatment ☐ Metallurgy
- ☐ Industrial Engineering
- ☐ Industrial Instrumentation
- ☐ Industrial Supervision
- ☐ Internal Combustion Engines
- ☐ Machine Design-Drafting
- ☐ Machine Shop Inspection
- ☐ Machine Shop Practice
- ☐ Mechanical Engineering
- ☐ Quality Control
- ☐ Reading Shop Blueprints
- ☐ Refrigeration
- ☐ Sheet Metal Worker
- ☐ Tool Design ☐ Toolmaking

RADIO, TELEVISION
- ☐ Industrial Electronics
- ☐ Practical Radio TV Eng'r'ng
- ☐ Radio and TV Servicing
- ☐ Radio Operating
- ☐ Television Technician

RAILROAD
- ☐ Air Brakes ☐ Car Inspector
- ☐ Diesel Locomotive
- ☐ Locomotive Engineer
- ☐ Section Foreman

STEAM AND DIESEL POWER
- ☐ Combustion Engineering
- ☐ Diesel—Elec. ☐ Diesel Eng's
- ☐ Electric Light and Power
- ☐ Stationary Fireman
- ☐ Stationary Steam Engineering

TEXTILE
- ☐ Carding and Spinning
- ☐ Cotton, Rayon, Woolen Mfg.
- ☐ Finishing and Dyeing
- ☐ Loom Fixi'g ☐ Textile Des'ing
- ☐ Textile Eng'r'g ☐ Throwing
- ☐ Warping and Weaving

MISCELLANEOUS
- ☐ Domestic Refrigeration
- ☐ Marine Engineering
- ☐ Ocean Navigation
- ☐ Professional Engineering
- ☐ Short Story Writing
- ☐ Telephony

Name_____ Age_____ Home Address_____

City_____ Zone_____ State_____ Working Hours_____ A.M. to P.M._____

Occupation_____

Canadian residents send coupon to International Correspondence Schools, Canadian, Ltd., Montreal, Canada. . . . Special tuition rates to members of the U. S. Armed Forces.

MAIL CAR

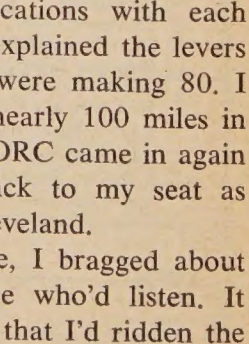
Running Orders, Waybills, and Sandhouse Gossip—from Railroaders, Fans, and the Editorial Crew

ALTHOUGH he enjoys the articles we have been publishing about bygone Western lines, especially "Nevada's Golden Railroad," by Lucius Beebe (Jan. issue), subscriber W. O. Comer, 308 N. Jackson St., Robinson, Ill., wants to see more about the East.

"How about the narrow-gage that ran through Bradford, Pa.?" he asks. "When I was a boy of six I lived at Bradford and had a sister living at nearby Kane, Pa. My mother would pack a basket with things for my sister and hand it to me with a note for the conductor. Then I would board the narrow-gage train. When we reached Mt. Jewett, where I got off to change, the conductor would tell the operator there to put me on the train to Kane. There were good men in those days."

There are plenty of good men today, too, Mr. Comer, but most of the wooden-axle pikes, as boomers called the neighborhood railroads, have gone with the wind. •

A RAILFANETTE who "crashed" the masculine sanctum of a diesel cab on a speeding passenger train is Miss Elizabeth Blake, 3197 W. 138th St., Cleveland 11, Ohio. The gal is proud of it.



Elizabeth Blake

"I was riding Erie train No. 5," she says, "coming home from Jersey City one August day in 1952. From the vestibule of a rear Pullman I was trying to snap a picture of the engine, No. 850, as she rounded curves. A kind conductor gave me a few tips. I got my best shot while crossing the state line, with me in Pennsylvania and the engine in Ohio.

" 'Would you like to visit the engine cab?' the conductor asked.

" 'And how!' I replied fervently.

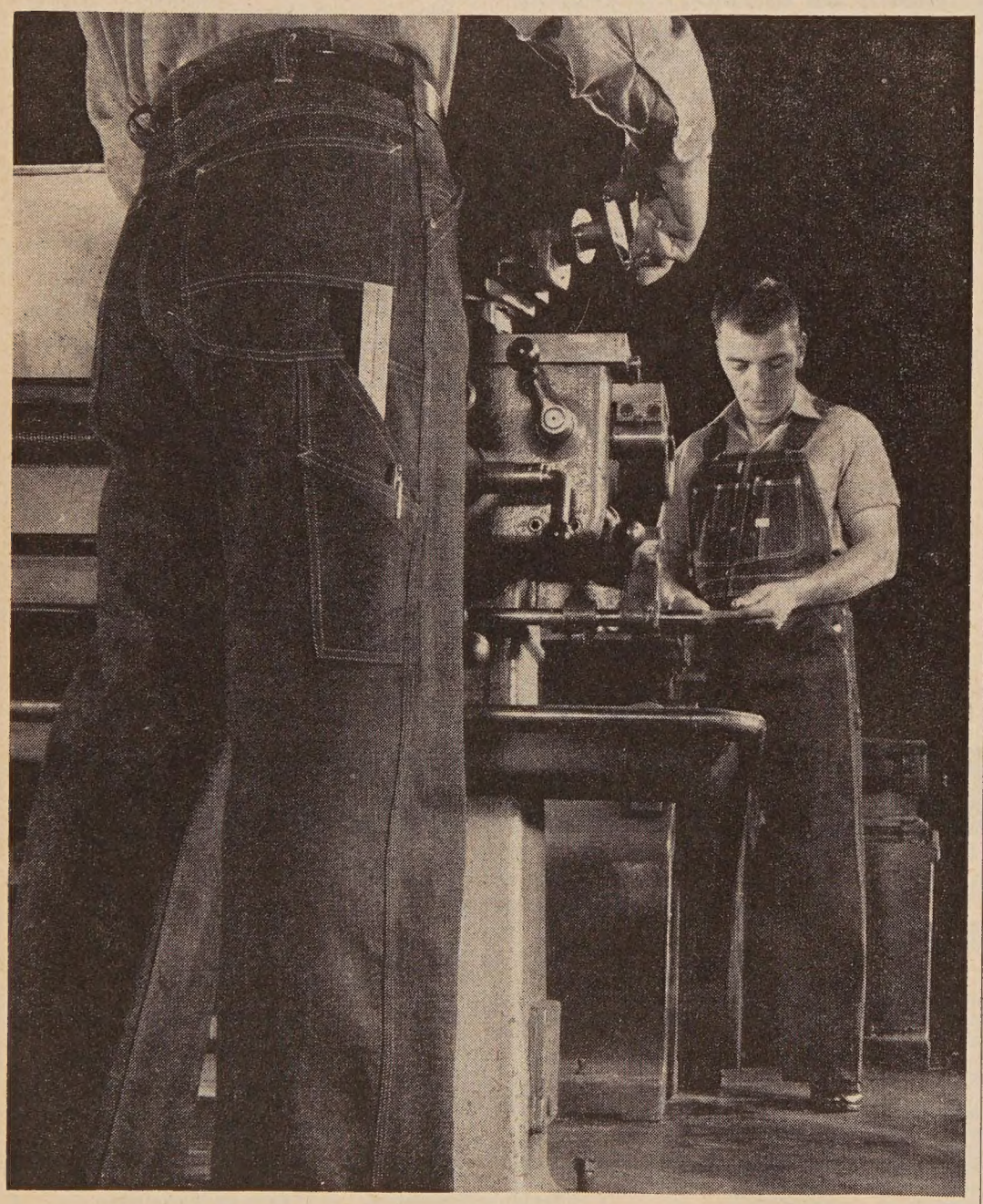
" 'Follow me,' he said.

"He led the way through the entire train, with me behind, camera in hand. My heart was pounding. I felt like a queen. When we entered the passageway through the engine room, the heat and noise and vibration overawed me. That passageway seemed endless. At length we reached the cab. The conductor introduced me to the engine crew and then went back to his job. I took a picture from the front window. Then the fireman shot me looking out the window. I prize both snapshots.

"Perched on a high stool and loving every second of it, I watched the fast-fleeting landscape. The engine crew exchanged signal indications with each other. The fireman explained the levers to me. He said we were making 80. I must have traveled nearly 100 miles in that cab before the ORC came in again and escorted me back to my seat as we were nearing Cleveland.

"After I got home, I bragged about this trip to everyone who'd listen. It amused me to think that I'd ridden the

From the denim named "Jelt"



The world's toughest work clothes

JELT DENIM is a tightly woven, super-tough material found *only* in Lee work clothes. Lee Overalls and Lee Dungarees, made of Jelt Denim are "worth-more" buys because they *wear more*—longer, better under the most rugged working conditions. Sanforized. Your Lee Dealer can fit you. The H. D. Lee Co., Kansas City 8, Mo.

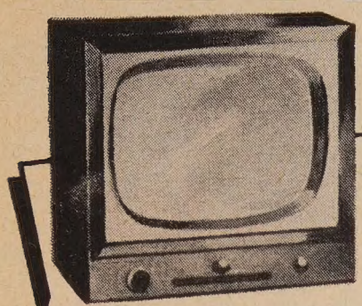
EVERY LEE GARMENT UNION MADE—*UNION LABELED*

COPYRIGHT 1955

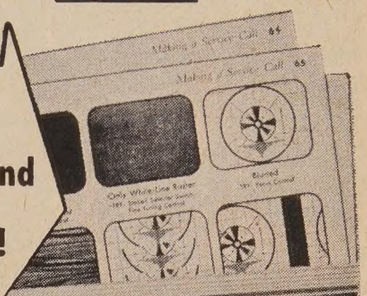
Lee CLOTHES

for work and play

FIX TV AND RADIO SETS RIGHT AWAY



—even if you never fixed a lamp or doorbell before!



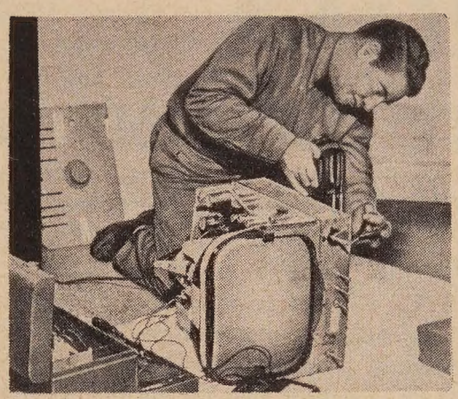
McGraw-Hill's Amazing New Low-Cost Instruction Manual Skips Hard-to-Understand "Theories" and "Formulas." Tells How-to-do-it in PLAIN ENGLISH!

WHY hasn't somebody done this BEFORE? That's what you'll exclaim the minute you start browsing through this amazing new one-volume instruction manual in TV and radio repair.

For here at last a well-known EXPERT has found a way to tell you in PLAIN ENGLISH how to fix almost ANY radio or television set. (And he even tells you where you can go to have the extra-tough jobs done FOR you . . . at reduced professional rates.) Right from the very first chapters you can start doing simple repairs . . . and before you're HALF way through the course, you can fix HALF the television and radio sets that you encounter. In just a few weeks you can start fixing your own and friends' sets . . . get a service shop job . . . even start your own money-making business at home.

Why It's So EASY to Understand

You get no complicated formulas, algebra, laboratory experiments. Instead you deal *only* with the parts that go wrong in sets—how to recognize the trouble—and what to do about it. "Easy as A-B-C" directions and 700 clear photos, diagrams, and drawings show you exactly WHAT and HOW to fix, step-by-step.



Save Money on Your Own Set

Save $50 to $100 a year just in installing, repairing, and servicing your own TV set. Book tells which controls to adjust or tubes to replace if picture is entirely dark—blurred—split—distorted—off center—tilted—wriggles and weaves—too pale—too black—jitters—snow effects—drifts—etc., etc.

The author is Associate Editor of *Electronics* Magazine. He spent FOUR years making this one-volume manual practical and easy-to-understand—even for an "unhandy" beginner.

Here's everything you need to know about *where* and *how* to buy tubes and parts, where and how to get an official circuit diagram for any receiver; how to choose and use basic tools; how to test tubes WITHOUT a tube tester; how to use 58 common TV controls; how to "diagnose" and "cure" common radio and TV troubles; how to fix loudspeakers, phono pickups; how to install and check antennas; and much, much more.

TELEVISION AND RADIO REPAIRING

TRY IT FREE ON YOUR OWN SET FOR 10 DAYS

PARTIAL CONTENTS

How to Remove and Replace Tubes • Testing Tubes without a Tester • Using a Tube Tester • Power-Supply Troubles • How to Test and Replace Resistors, Controls, Switches, Condensers, Coils, Transformers • Loudspeakers • Phono Pickups and Needles • Antennas . . . MUCH MORE.

"Written as simply and clearly as possible. A natural for the beginner."
—Radio & TV News

"Prepared for people who know *absolutely nothing* about radio or use of tools."
—Radio Electronics

"Unique in its ability to explain servicing in easy-to-understand terms."
—Electrical South

Tells HOW to "Cash In" ON THE BIG DEMAND For RADIO-TV REPAIRMEN

Over 25 million TV sets . . . over 100 million radios! Make nice extra money just fixing sets for friends and neighbors in your spare time . . . or start your own full-time repair business. Book tells exactly how to get started; which tubes to stock; how to make a service call. Actually start fixing sets and making money before you're half-way through book.

SEND NO MONEY

Examine this book for 10 days BEFORE you decide if you wish to own it. Try it out FREE on your own or a neighbor's set. See how simple and easy it makes nearly every repair job. Make it *pay for itself in 10 days* or don't keep it! Mail coupon to: **McGraw-Hill Book Co., Inc., Dept. ADV-3, 327 West 41st St., New York 36, N. Y.**

FREE 10-DAY TRIAL COUPON

McGraw-Hill Book Co., Inc., Dept. ADV-3,
327 West 41st St., New York 36, N. Y.

Please send me, for 10 days' FREE EXAMINATION, your one-volume "Television and Radio Repairing," by John Markus. If not delighted, I may return book, pay nothing. Otherwise, I will send only $1.95 plus few cents delivery; then 3 monthly installments of $2.00 each.

Name.....

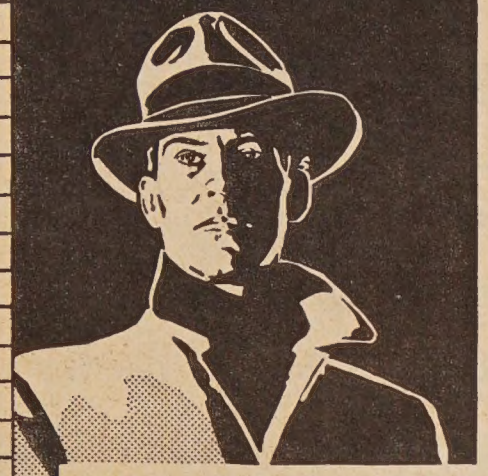
Address.....

City.....Zone.....State.....

ADV-3

☐ SAVE MONEY. Check here if enclosing full price of $7.95 *with* coupon. Then WE will pay for delivery. Same 10-day return privilege. (*Offer good in U.S.A. only.*)

Investigate...



The Opportunities That Await YOU NOW

In Scientific Crime Detection Work

Follow in the steps of this successful career man . . . start to train now for a responsible, steady, well-paying position in the field of criminal investigation. If your job is dull, routine, without future . . . then here is your opportunity to forge ahead in an interesting career where trained men are always needed. For 36 years we have opened the "door to success" for hundreds of men in scientific crime detection . . . and now we will train you to take advantage of these same opportunities *if* you act immediately!

We will train you in your spare time through step-by-step home study lessons. I.A.S. training is neither expensive nor difficult to learn.

Over 800 American Bureaus of Identification

Employ I.A.S. students or graduates . . . factual proof of what I.A.S. training can do. Every one of these men learned FINGER PRINT IDENTIFICATION, FIRE-ARMS IDENTIFICATION, POLICE PHOTOGRAPHY AND CRIMINAL INVESTIGATION—the economical I.A.S. home study way.

So don't delay! Cash in on the increasing opportunities for finger print technicians and criminal investigators.

FREE! "BLUE BOOK OF CRIME"

Packed full of thrills. Reveals "behind the scenes" facts of actual criminal cases. Tells how scientific investigators solved them through the same methods you learn at I.A.S. Explains, too, how you can get started in this profession at low cost. Don't wait . . . mail in this coupon today.

INSTITUTE OF APPLIED SCIENCE
(A Correspondence School Since 1916)
Dept. 5812,1920 Sunnyside, Chicago 40, Ill.

CLIP AND MAIL COUPON NOW

INSTITUTE OF APPLIED SCIENCE
1920 Sunnyside Ave., Dept. 5812
Chicago 40, Illinois

Gentlemen: Without obligation, send me the "Blue Book of Crime," and list of Identification Bureaus employing your students and graduates, together with your low prices and Easy Terms Offer. No salesman will call.

Name.....

Address.....RFD or Zone.....

City.....State.....Age.....

cab with no bother at all, while my father, who worked in the Erie's accounting department, had gone through a lot of red tape to get permission to do it some time before." •

CANADIAN PACIFIC, now operating the world's longest diesel-locomotive run—Montreal-Vancouver, 2881 miles—will soon complete the dieselization of its transcontinental passenger trains, plus many fast freights. Delivery of 100 new units now on order will bring CPR diesel fleet to 509.

Our front cover shows one of these runs, No. 7, *The Dominion,* half a mile west of Exshaw, Alta., and a mile and a half east of The Gap (eastern limit of the Canadian Rockies). The picture was made by Nicholas Morant, CPR ace photographer, on Ektachrome film with a 5x7 Deardorff camera and one-fiftieth of a second exposure at 6.3.

A streetcar accident in 1924 started his career. Nick was then a schoolboy of 14 with a photographic hobby and often carried a box camera. One day he was riding a trolley in Victoria, B. C., when it struck a laundry truck. He snapped a picture of the accident. Minutes later, officers looking into the crash seized his camera, but the shrewd lad meanwhile had changed rolls and hidden the scoop in his pocket. He sold it to an insurance company. It was his first sale.

The career which began with one form of transportation, a streetcar, has since been devoted largely to the Canadian Pacific. Nick has also worked on a newspaper, the *Winnipeg Free Press,* being known as "Canada's most versatile photographer." During World War II he pictured all phases of the Dominion's war effort.

Nick first went railroading as a clerk in 1929. Eight years later he became a special CPR camera man with a great deal of liberty for taking the types of pictures he liked best. Many *Readers Digest* covers have been his. *Life* magazine twice chose his shots as "picture of the week." Some of Canada's most beautiful postage stamps have been adapted from Morant photos.

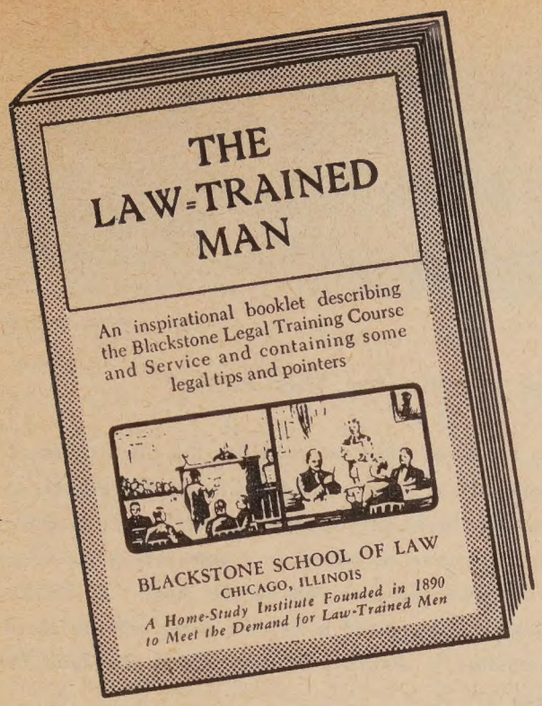
In connection with his work, Nick has had some breath-taking escapes from death—by revolver shot, by bayonet, by airplane accident, and by grizzly bear. He is, perhaps, the only man alive who attacked a grizzly with his bare hands. It happened in the Canadian Rockies. Morant went to rescue his guide. The bear then turned on Nick, sending him to the hospital. The guide survived for a time, but both he and his wife died of shock.

Nicholas Morant, creator of this month's front cover photo.

In 1937, while photographing a Winnipeg fire, he met a pretty girl named Ivy May Young, whom he married shortly afterward. Ivy accompanies Nick on most of his trips as his assistant; she is a camera artist in her own right.

"A camera man publicizing Canadian Pacific's new dieselized trains is selling something," says Nick. "Picturesque as the old steam engines may have been, they now represent the horse-and-buggy days of rail transit. Today's public looks for comfort and cleanliness in travel. My pictures must depict this, and a nice trim diesel does a better job than a coalburner. Railway staff photographers must sell company officials sound publicity ideas and must produce pictures that won't embarrass them 'in the trade.' For example steam

Nick's wife in a CPR engine cab.


THE LAW-TRAINED MAN
An inspirational booklet describing the Blackstone Legal Training Course and Service and containing some legal tips and pointers
BLACKSTONE SCHOOL OF LAW
CHICAGO, ILLINOIS
A Home-Study Institute Founded in 1890 to Meet the Demand for Law-Trained Men

A FREE LAW BOOK FOR YOU

SEND FOR THIS BOOK TODAY

"The Law-Trained Man," pictured in reduced size above, is an illustrated book on law which the Blackstone School of Law has just published for complimentary distribution. *You may have a copy free upon request.*

All the questions you ever asked yourself about the opportunities for the law-trained man in business or in the practice of the legal profession are answered in this authoritative book. The following list of section titles gives a definite idea of the scope and value of the contents:

The Object of Law Study — How to Prepare for the Bar — Success of Graduates — The Blackstone 60 Subject Curriculum — Big 16-Volume Modern American Law Library Furnished—M. A. L. Study Aids—Appearing in Court as Your Own Attorney — Bachelor of Laws (LL.B.) Diploma — How to Enroll.

Frankly, "The Law-Trained Man" was written by us for the sole purpose of arousing interest in the internationally famous Blackstone home-study legal training course and service. Law is the aristocrat among training courses. Law students are stamped as men of discernment and dignity. They are looked upon with respect.

A knowledge of law enhances earning power and helps to win advancement. The demand for men trained in the law is growing constantly. Since 1890 the Blackstone home-study legal training course has been meeting and satisfying this demand. Today the School can point to more than 60,000 substantial men and women who have received financial, personal or business benefits from Blackstone training.

The Outstanding Course

There is a reason for this remarkable success of students and that reason is to be found in the excellence of the instruction material provided. Each Blackstone student is supplied with the famous 16-volume MODERAN AMERICAN LAW library, referred to in citations as "M.A.L." This set of books, covering the entire field of modern day law, forms the basis of the course.

The study of these texts is directed by means of elaborate lesson material which among other things contains examination questions similar to those asked in bar and C. P. A. examinations. The experience gained by the student in doing this written work almost guarantees his success when he sits for a state examination. Graduates are awarded the Bachelor of Laws (LL. B.) degree. The tuition cost is moderate; convenient monthly terms are available.

No Exaggerated Claims

The School makes no claim that the study of its course will bring a startling increase in income to every student. Yet, many students have reported increases, some as high as 200%, before even completing the course. Neither is any claim made that a law training will enable you to earn $50,000 a year. Yet, a great many law-trained men earn far in excess of that. The School *does* claim, however, that a law training is the best foundation for successful business or professional career, and that its course is without a peer in the field of non-resident law instruction today.

Write For Free Booklet Today

So send for your FREE copy of "The Law-Trained Man" now, without hesitation. And without hesitation you will receive by return mail this exciting book which will help you to determine whether the ambitious Blackstone LL. B. program is meant for you or not. Submit your request in a letter, on a post card, or use the convenient coupon below and let it come forward while the present edition of this very valuable book is still available for complimentary distribution. BLACKSTONE SCHOOL OF LAW, 225 North Michigan Avenue, Chicago 1, Illinois.

BLACKSTONE SCHOOL OF LAW
Dep't 423 , 225 North Michigan Ave.,
Chicago 1, Illinois

GENTLEMEN: Please send me without cost or obligation a copy of the revised edition of "The Law-Trained Man," together with details of your home-study law course.

Name.....

Occupation.....
Street
Address.....

City.....**Zone**.....**State**.....

Anatone gives healthful support while it slims!

Supports sagging stomach muscles. Helps you get blessed relief from nagging backache. Slims inches off your waist. The scientifically-developed ANATONE BELT now helping thousands of men in all walks of life. Made of elasticized fabric with reinforced stitching, special stays to prevent wrinkling and rolling. No crotch piece. Forget diets, forget exercises . . . results guaranteed or purchase price back. Waist sizes 26" thru 52"

Introductory mail order price—mail coupon today.

$4.98

10 day free trial ...send no money

MAGIC-MOLD, Inc., Dept. A7903
467 Livonia Ave., B'klyn 7, N. Y.
Send me for 10 days' FREE TRIAL an ANATONE BELT. I will pay postman $4.98 (plus postage). If not completely satisfied, I may return the ANATONE for full refund of purchase price.
My waist measure is.....
Name .....
Address .....
City..... Zone..... State.....
☐ Save money. Enclose money now and we pay postage. Same money-back guarantee. Add 50c extra on Canadian and Foreign orders. Prepaid only.

WHAT TREASURES WILL *You* FIND?

Exciting Treasure Hunt! This big cloth bag contains over 1,000 genuine foreign postage stamps from more than 30 foreign countries in Asia, Europe, Africa, the South Seas, etc. Stamps are mostly still on paper, unpicked, unsorted, weighed out in bulk, just as received from missionaries, banks, etc. Nobody knows what's inside! Worth $10 or more at Standard Catalog prices.

FREE! Valuable booklet "How to Collect Stamps", if you order TODAY. Money back guarantee.

ONLY $1.00 Postpaid

COMMENDED BY PARENTS' MAGAZINE

H. E. HARRIS & CO.
1556 Transit Bldg., Boston 17, Mass.

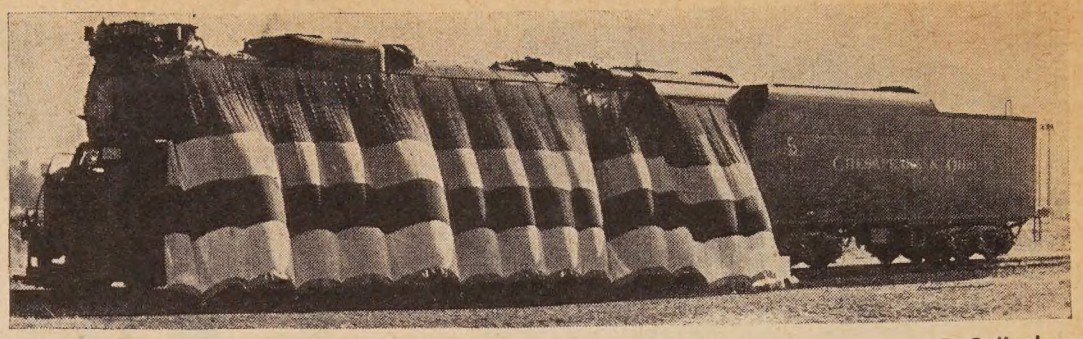
GIVE BLOOD!

See Your Local Red Cross Chapter, Today!

***Free!* 107 "IRON CURTAIN"**

Sensational Stalin stamp **PLUS** 106 others, all different, from Russia, Bulgaria, Czechoslovakia, Romania, Ukraine, etc. Hard-to-get, smuggled from behind the infamous Iron Curtain! **Guaranteed** worth nearly $2.50 at Standard Catalog prices! **ALSO** valuable booklet "HOW TO RECOGNIZE RARE STAMPS" and other fascinating offers for your consideration. All **for only 10c** covering postage and handling. Send *TODAY!*

KENMORE STAMP COMPANY
MILFORD 0-550, NEW HAMPSHIRE



James P. Gallagher

Can You Pick a Title for This Photo?

We'll give $10 to the reader who sends in what we consider the most original title for this picture of a C&O steam locomotive donated to the City of Buffalo, N. Y. The contest is open to everyone except employes of Popular Publications, Inc. Only one entry per person. Each entry must be written or typed on a separate piece of paper or card. None will be returned. All must be received before April 15, 1955. Our editorial staff will be the sole judges. In event of a tie, the prize will be awarded to the entry bearing the earliest postmark. Address Contest Editor, *Railroad Magazine*, 205 E. 42nd Street, New York 17, N. Y.

engines emitting volumes of smoke may well be dramatic, but that smoke means wasteful locomotive operation and, from the passenger's viewpoint, soot and cinders.

"Photography for the Canadian Pacific is not just a railfan's dream. The railways of Canada are more nearly all-embracing than are those in the States. Among other assignments, I cover general landscape work for station-interior picture frames; and views of our hotel chains, inside and out—an interior requires as much as 30,000 watts of light to photograph in color—and the Canadian Pacific Airlines and trans-Atlantic ship interiors, our coastal services to Alaska, the telegraph company, and even interiors of silver mines and smelters.

"The wife and I are regularly on the road with 60 pieces of baggage, weighing more than a ton. This includes a portable laboratory, the lighting equipment, cables, and so on." •

YES OR NO? Two suggestions come from R. L. Pfeiler, Long Beach, Calif.: "I got a bang out of Joe Easley's clever sketch entitled 'How many mistakes can you find in this picture?' (Oct. '54). Give us more of them! Also, 20 years have passed since you printed a dictionary of railroaders' lingo. Why not repeat on it for the sake of new readers?"

Why not, fellows? Yes or no? •

LAMENT by Henry R. Griffiths, 2714 Ponderosa St., Boise, Idaho: "Steam power in this state is just a memory, most of it having disappeared within the last two years. I was lucky in being able to photograph a good share of Idaho's steam operations."

Few camera artists have caught the feel of railroading more dramatically than Griffiths. Our September '54 issue carried a double-page shot of his, called "The power and the glory of vanished yesterdays." •

ANNUAL PASSES of at least two roads bear pictures typifying their territory, reports H. L. Hampton, 69 W. Hazelwood Ave., Rahway, N. J. Passes of the 74-mile Apache Railway, which connects with the Santa Fe at Holbrook, Ariz., show an Apache Indian profile, while those of the San Luis Central, a 15-mile steam line in potato-growing Colorado, depict four spuds. Who can add to this list? •

CLOCK WATCHER Jacob Bechtold, tender of the timepieces in Grand Central Terminal for more than 50 years, has just retired at age 77.

When he started working for the New York Central in 1903 Bechtold was given charge of fewer than 25 clocks. At his retirement he was tending about 1000. Most famous of the lot is the four-faced "golden clock" mounted over the Information Booth in the main concourse. But in J.B.'s eyes, the world's most beautiful timepiece is the one he calls "the big fellow." It adorns the main 42nd Street entrance.

His assistant, Paul Kugler, has taken over. •

SAYS Kenneth H. Kerr, YMCA, Columbus, Ga.: "I like *Railroad's* format very much, including the Ektachrome cover pictures and the new-style lettering above them. Your present steam-juice balance is just about right. I depend on *Railroad* to keep me posted on North America's few remaining electric lines." •

NEW YORK CENTRAL has filed petitions for discontinuance of passenger service on its West Shore Railroad and ferries between Weehawken, N. J., and Manhattan. The company maintains that these services jointly entail a loss of more than $2,000,000 a year—roughly $326 for each commuter who uses them. The services were instituted over 70 years ago, when ferries were the only means of crossing the Hudson River between New Jersey and New York City. Since then, two tunnels and a bridge have been built.

Commuters are yelling loudly against the proposed change, but Alfred E. Perlman, the Central's president, says: "This rail-ferry transportation facility already has been abandoned by 85 out of every 100 passengers in the last 25 years." •

CREW DISPATCHER pictured on page 32 is Harold J. Conway, 2302 E. 37th St., Savannah, Ga. He started as a car apprentice on the Central of Georgia, became a clerk, served in the Army overseas during World War II, and became a crew dispatcher in 1945. He tells us:

"My father was a car foreman on the Seaboard for years, but went out in the strike of 1922 and never returned. An uncle of mine was chief car inspector for the Central of Georgia here in Savannah.

"Almost everybody has phone service now, so it's rarely difficult to find men for crews. We have to line up and call all my crews here. It means making split-second decisions, because trains can't wait. My job isn't dull. There's always something coming up, such as rule changes."

We asked Mr. Conway, "What do you do on the job when you're not calling crews?"

"Well," he said, "I usually study the board to see if I have all crews lined up right and I check the agreements with labor organizations and the rule changes."

In the days before telephones were commonplace, the crew caller—known as a callboy—would make his rounds afoot, or on a bicycle, or on horseback, toting a little black book that the crew member had to sign. A smart callboy usually knew where to find his man. He would head for the man's favorite hangouts—boarding house, pool hall, burlesque theater, dance hall, or red-lighted house on Sporting Row—and stick to the trail until he had another autograph in his book. •

GLAMOUR? "The colored photos of old engines you gave as a subscription premium are fine," writes L. U. Craddick, 808 Herbert St., Alton, Ill., "but I question the word *glamour* in the text matter describing them. Webster defines *glamour* as 'charm, enchantment, fascination.' I remember the clattering old side-rods, the acrid odor of coal smoke, and the dust and cinders in my eyes, but somewhere along the line I lost out on glamour.

"Turn back the pages and have a look. I fired on the Chicago & Eastern Illinois out of Villa Grove, Ill., from 1913 to 1937. Mine were not the pioneer days. I never fueled a wood-burner nor raced hostile Indians nor shot buffalo from a cab window. But I had my moments. On my very first trip I joined the birds. I was there at two cornfield meets, and the best years of my life were marred by frozen feet and more than one cracked bone—none of which I found glamorous.

"Did I hear you say 'the good old days'? Come back with me to that era, to the eight-mile drag up Brubaker hill with a green fire on a long-barreled 900. It's hot and sultry, no air stirring, and you're pulling 50 cars of John L. Lewis. Your flues are leaky, your door rings cracked, and a bucket of sawdust is standard equipment.

"Swing chain firebox doors . . . smoky oil headlight . . . frozen tank

(Continued on page 70)

Makes Dogs SAFER for Kiddies to Play With

End biting fleas, stop scratching. Gives pleasing aroma. No messy powders. Replaceable treated inner pad is effective for many months. **$2.98**
Regular size 15x28-in.
Super size 28x36-in. . . **$4.98**
Money-Back Guarantee

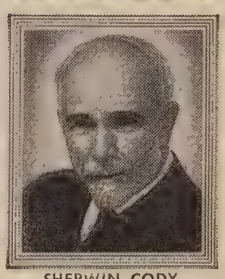
FLEA-SCAT PAD

Liquid Chaperone Keeps pets out of gardens, garbage can. Spray on. **Bottle $1. Powder Chaperone** keeps dogs off chairs, beds, rugs. No more dog hairs—stops puppy damage. Keeps male dogs away from females in season. **Shaker Pkg. $1. Kitty Chaperone** keeps cats from clawing furniture, drapes, and sleeping where not wanted. **Shaker Pkg. $1.**

SEND NO MONEY—Order C.O.D., or send check and we'll pay postage. Order Now.

SUDBURY LABORATORY, Box 871, South Sudbury, Mass.
Stores: Write for Special Offer.

Do You Make these Mistakes in ENGLISH?



SHERWIN CODY

MANY persons say "between you and I" instead of "between you and me"—or use "who" for "whom"—or don't know whether to spell certain words with one or two "e's" or "m's" or "r's" or with "ie" or "ei", etc. Mistakes in English reveal lack of education, refinement—prevent you from presenting your thoughts in the strongest way. Real command of English will help you reach *any* goal.

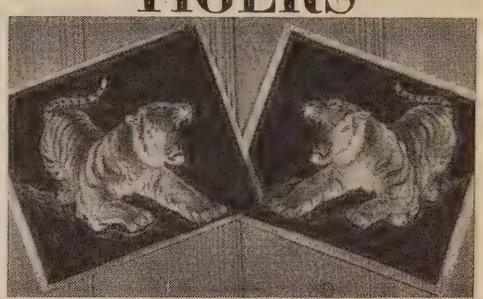
Wonderful Invention

Only 15 minutes a day with Sherwin Cody's famous invention—and you can actually SEE your English improve. It teaches by HABIT—makes it easier to do the RIGHT way. Wonderful, self-correcting lessons.

FREE BOOK ON ENGLISH. Lack of language power may be costing you thousands of dollars every year. See what Mr. Cody can do for you; it costs you nothing to find out. Write for free book, "How You Can Master Good English in 15 Minutes a Day." It will prove a revelation. WRITE NOW.

SHERWIN CODY COURSE IN ENGLISH
1153 Central Drive, Port Washington, N. Y.

TIGERS



TIGER prints to give your room a rugged, adventure look. Realistic in charcoal black and gold, these IMPORTED TIGERS are painted by Japanese artists. A guaranteed eye-catcher in bamboo frame or under a glass tray. Others include:

PANTHERS—Sinewy, jet black
SUMARI HORSEMEN—in full ancient costume
ORIENTAL SCENES—Geisha girls, pagodas, etc.
LANDSCAPES—Vibrant and colorful

Your satisfaction guaranteed or your money refunded. Unframed 15″ x 18″, $2.50 each or matching pair $4.50 pp.

HMMH Importers, 6316 Longview Ave.
DEPT. PM, LOS ANGELES 28, CALIFORNIA

red!

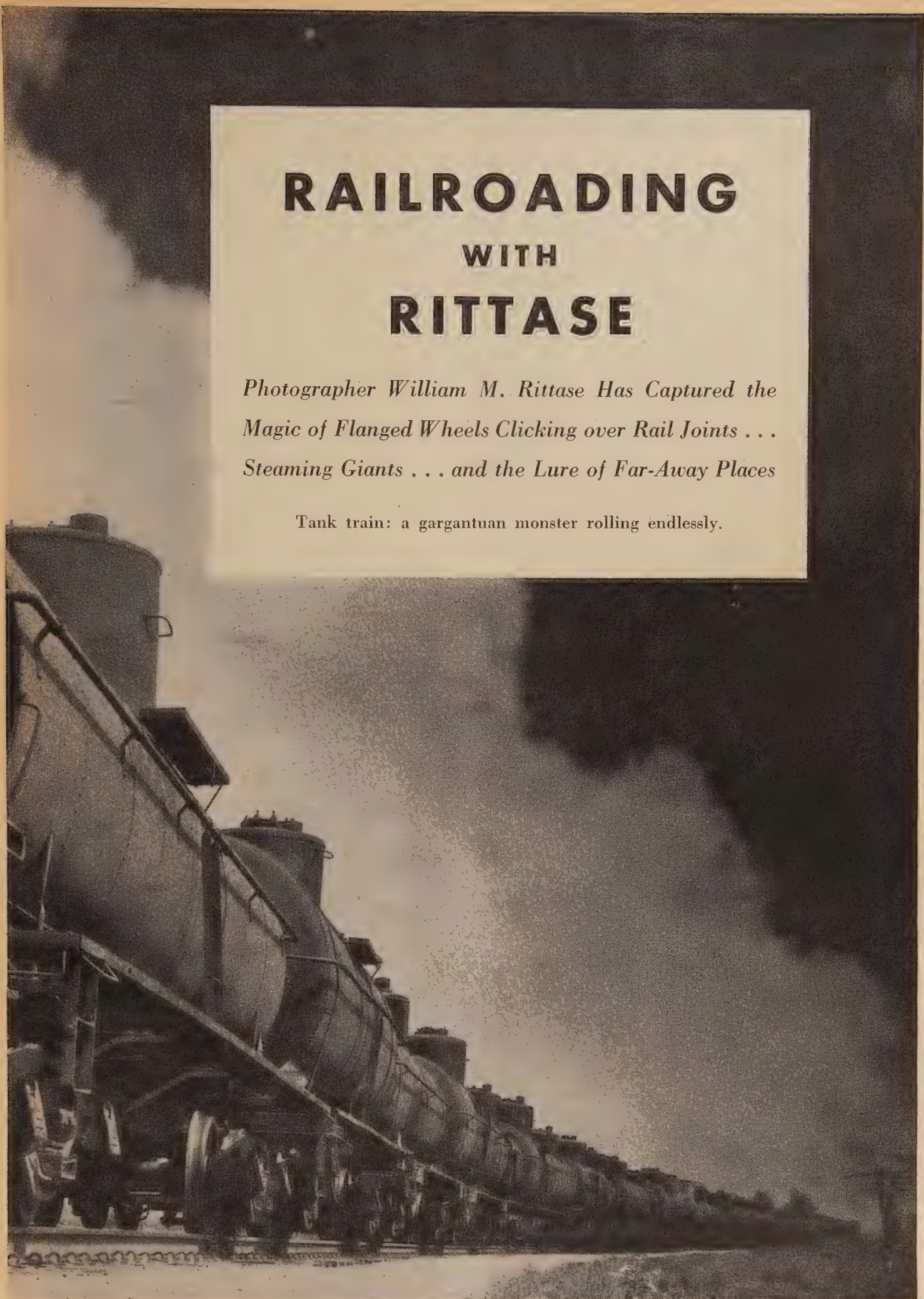
A most exciting gift! Gay FIRE RED briefs of sheer nylon—permanently pleated all around and trimmed with exotic black nylon lace.
$1.98 postpaid
Two Pair **$3.49**
Matching SHEER brassiere of RED nylon and peek-a-boo black lace.
$3.95 postpaid

Specify Small, Medium or Large or send Bust & Hip Measurements
Air Mail Postage and Handling 25c Additional.

charmand's
Studio N-3, 3223 McKinney Avenue, Dallas 4, Texas

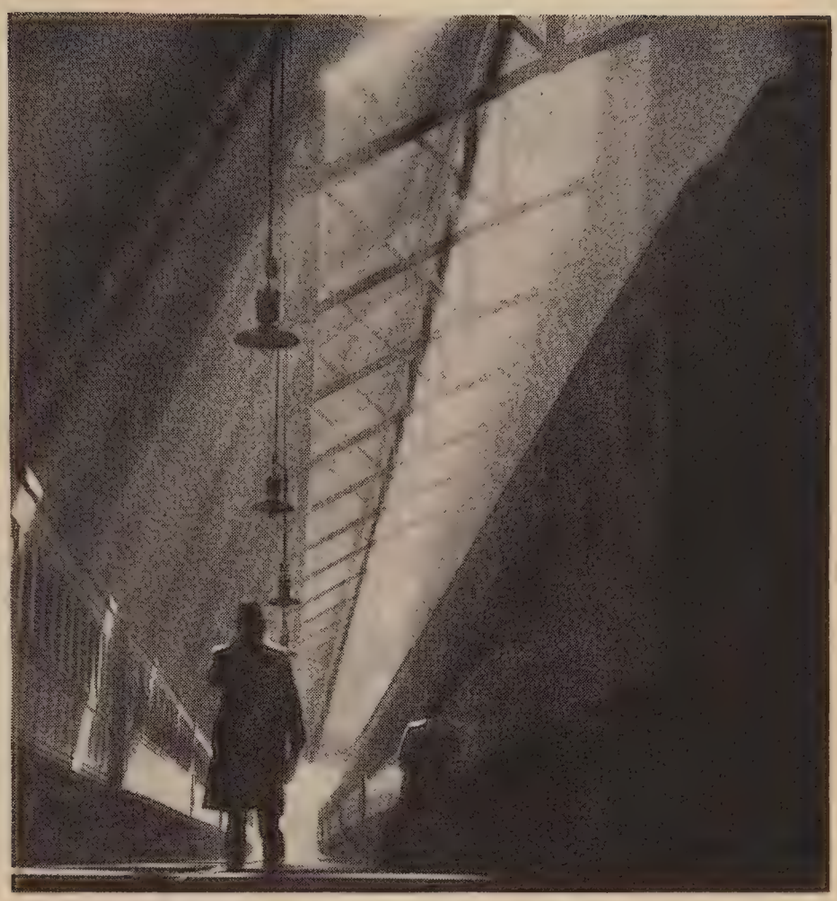
RAILROADING WITH RITTASE

Photographer William M. Rittase Has Captured the Magic of Flanged Wheels Clicking over Rail Joints . . . Steaming Giants . . . and the Lure of Far-Away Places



Tank train: a gargantuan monster rolling endlessly.

The Reading's roundhouse and turntable at Reading, Pa., used to be a cacophony of blasting steam, clanking couplers, and tolling bells.



Lone traveler wanders through a mystic world of lights and shadows in the train shed of Chicago's ancient La Salle Street station.

A knight in shining armor: the Reading's only streamliner, *The Crusader*, moves majestically across the Schuylkill River.

Seeking "something different," Rittase climbed on top of a roundhouse to get this unusual shot of Reading power.

The gathering shadows make this an impressive camera study of the Chesapeake & Ohio yards at Charleston, West Virginia.

Like a caravan of dreams, a Chesapeake & Ohio steam train sweeps around a bend in the New River Valley.

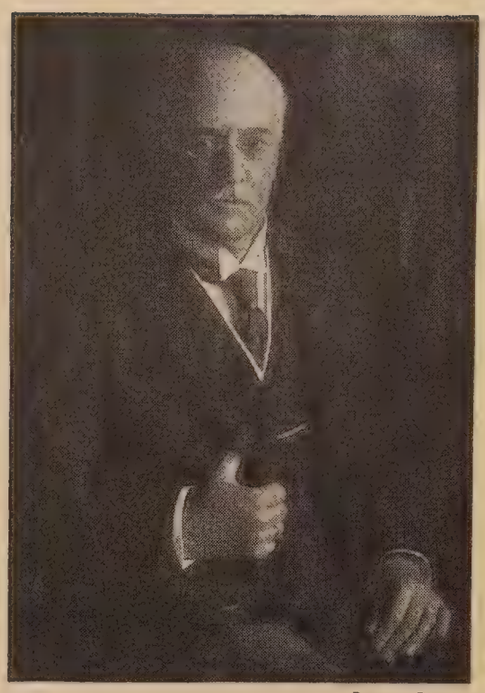
Did you ever reach for the brass ring on a merry-go-round? Some such feeling animates this Pere Marquette (now C&O) brakeman about to grab train orders. Note that the upper bar is down; the engine crew already have their flimsies.

Vincent Lopez

In the Thirties, this diesel-powered New York Central freight rolled for the last time over New York City's "Death Avenue" route on 10th and 11th avenues where diesels saw their first railroad switching service. Cowboy warned traffic of approaching trains.

His Name Is a Locomotive

Rudolf Diesel's Engines Are Putting Out Locomotive Fires All Over the World



Brown Bros.

Rudolf Diesel, inventor of engines

THIRTY YEARS AGO, when there were 63,612 steam locomotives in America and only one diesel, or even fifteen years ago, when there were only about 800 diesels, a motive-power expert could admit his ignorance of diesels without losing face. Today, when the steamer has vanished from forty-seven major American roads and the diesel hauls eighty percent of all rail traffic, it's time to admit that a major revolution has taken place in transportation and that, as in all revolutions, the old regime has to make peace with the new.

But if most people know little about the diesel, they know even less about Rudolf Diesel himself, whose name it bears.

Born in Paris in 1858, the son of a Bavarian bookbinder, Rudolf worked as a lad in his father's workshop and delivered books in a pushcart. When the Franco-Prussian War broke out in 1870, he went to live with an uncle at Augsburg, Germany, where he studied to be an engineer. At twenty, young Diesel was studying at a Munich school under Carl von Linde, who had invented the process of liquefying air, and upon graduation went to work at the Linde refrigeration factory in Paris.

In studying refrigeration, Mr. Diesel was impressed with the amount of heat generated when a gas is compressed. On the basis of this observation he developed the principle on which his engine rests. In a diesel, air is blown into a cylinder and compressed by a moving piston so that its temperature rises to around 1000 degrees Fahrenheit. Fuel is then sprayed into the cylinder where the heat ignites it, and the expansion which results drives the piston back down the cylinder.

Diesel patented his engine in 1892, but it took him another year to complete his first experimental model. Oddly enough, the first diesel was a coal-burner. Started by outside power, when pulverized coal was injected, the engine blew up. Though badly injured, Diesel was delighted. The explosion proved that the heat of compression was great enough to ignite the fuel. Four more years of hard work produced a 25-horsepower, single-cylinder engine, burning a low-grade oil. This oil engine had a thermal efficiency three times that of any steam plant then in operation—and the highest to be found in an engine anywhere.

Overnight, the diesel fever spread through Germany, France, and Belgium. It came to the United States when Adolphus Busch, the beer baron, installed the first American-made diesel in his St. Louis brewery. Used first as a stationary power plant, it began replacing steam on small ships, just as later it was to put out steam locomotive fires all over the United States.

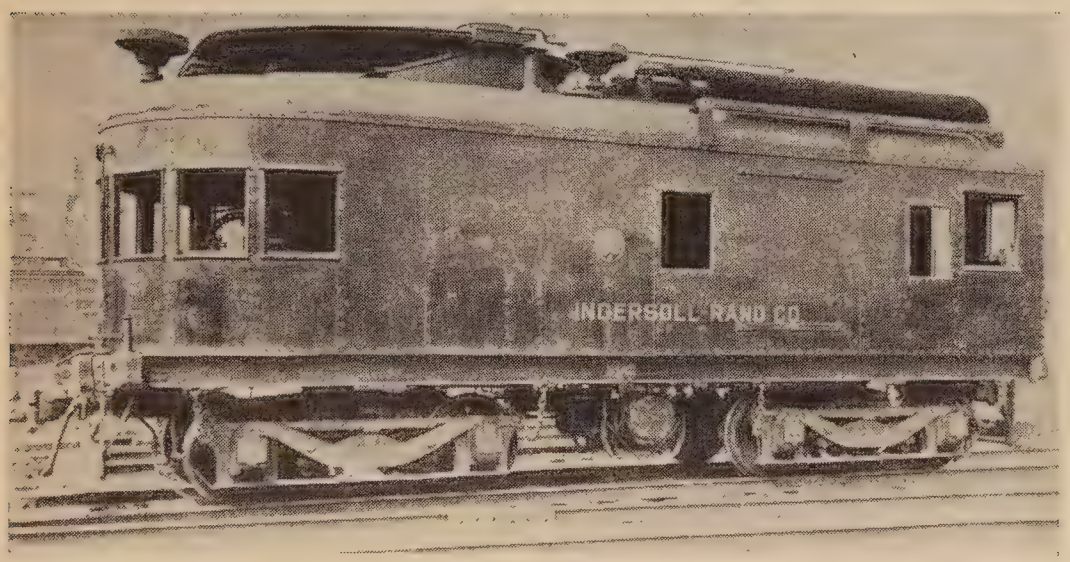
In 1913 the first diesel locomotive

was ready for a trial run. She was a failure. Designed in 1909 for use on the Hessian-Prussian State Railways, the 1000-horsepower engine connected directly with the drivers. With this direct drive she couldn't vary speed enough for train operation. An intermediate transmission was needed. But the outbreak of World War I put an end to further experimentation, and the pioneer machine was scrapped.

Now we come to a mystery. In September, 1913, Mr. Diesel and two friends left Antwerp on a Channel steamer bound for England, where a new diesel plant was being opened. Diesel and his friends had dinner, and afterward strolled on deck before going to their staterooms for the night. When the boat docked at Harwich, the famous inventor had disappeared!

None of the valuable papers in his cabin had been disturbed. No note, no clue, no trace of his body was found. Even today, his fate is still a secret.

Some have suggested that the inventor was pushed overboard because he knew too much about Germany's diesel-powered submarines, the Reich's trump card in the coming war. Possibly the Kaiser's agents feared that Mr. Diesel might disclose vital military information to his English associates.



Geo. A. M. Morris

First American diesel was this 300 hp. switcher (top) built by General Electric for Ingersoll-Rand. First diesel in regular service was Jersey Central's 1000 (above) which is still switching in the road's Bronx yards.

BY THAT TIME, the first experimental internal combustion engines were already being built in the United States. The gasoline-powered McKeen Motor Cars, for instance, went into production as early as 1905. A year later, the General Electric Company designed and built a gasoline-electric railcar, first used on the Delaware & Hudson. This type of car had much popularity for light passenger use during the fifteen years which followed.

With the success of the railcar, the diesel's triumph was virtually assured. For the engines of these railcars, like those of the later diesels, generated electricity which turned the wheels. The revolution had begun.

The first American diesel-electric was built in 1912 for the Ingersoll-Rand Company by General Electric. This one mounted half of a gasoline-electric railcar body on a flatcar and equipped it with a 300-horsepower Ingersoll-Rand diesel engine. The 60-ton experimental unit, No. 8835, went into service at the IR yards at Phillipsburg, N. J., in the spring of 1924. Later she took off on a tour of railroads and industrial firms for trial as a replacement for the conventional steam locomotives.

Beginning June 9, 1924, the unit was in switching service for two months on the New York Central's tracks on 10th and 11th Avenues and between 33rd Street and St. John's Park in New York City. It was the first appearance of a diesel on any American railroad, though no one ever bought her.

Ingersoll-Rand joined with General Electric and the American Locomotive Company in developing and manufacturing the new locomotives. On December 17, 1924, the new combine's first unit left Alco's Schenectady works for extensive road trials. The following October she was put to work switching in the Jersey Central yards in the Bronx section of New York City. She is still working there.

Alco's new road switcher, a 2250 hp. all-purpose freight and passenger hauler, wheeling a long drag during her road trials. Early success with switchers prompted Alco's pre-war diesel experimentation.

Those early IR-Alco-GE locomotives—including the larger 600-horsepower, two-engine units which went into production in 1926—were little better than converted boxcars with the power units located in the center and the engineman's controls at either end. Thirty-six more were built, twenty-one of which duplicated the original 300-horsepower proto-type.

About that time, other manufacturers entered the field, among them the Baldwin Locomotive Works, which had been building efficient gasoline-mechanical locomotives for light industrial purposes since 1910.

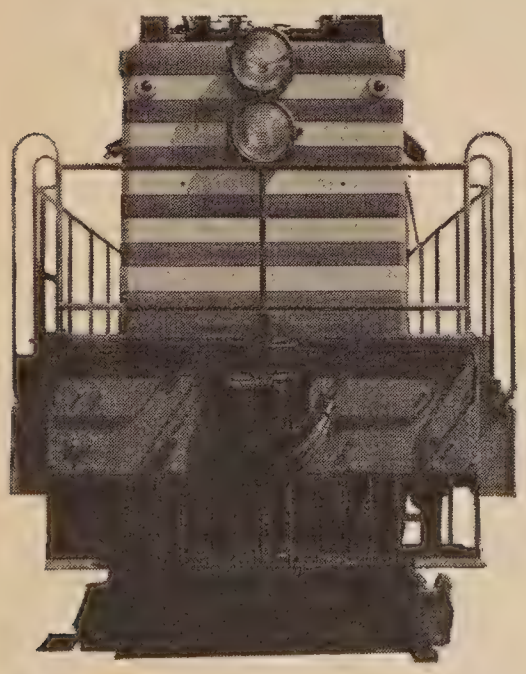
Baldwin's first full-sized diesel- electric was the 58,501. This 1000-horsepower unit, with box-like construction of the IR-Alco-GE models, was completed in 1925 in association with the Westinghouse Electric & Manufacturing Company, with which Baldwin had been building electric locomotives since 1895. The 58,501 was tested on several roads, but was never duplicated, and she ended up switching in the yard of the Baldwin plant.

BLW then tried out a 300-horsepower, two-unit articulated cab type. This one went into switching service in 1928 on the Long Island Rail Road at passenger terminals and industrial plants adjacent to the electrical railway zone. Then the Baldwin-Westinghouse combine built another 1000 horsepower, experimental model, several large switchers for industrial use. Finally, in 1930, they turned out two locomotives weighing 70 and 114 tons, respectively. Those two were later sold to the Northampton & Bath.

IRONICALLY, the first year of the Depression saw the birth of a great name in American diesel-electrics. General Motors, having decided to go into the diesel business, bought the Winton Engine Company and the Electro-Motive Corporation, a manufacturer of lightweight self-propelled

Jacob Lofman, Pix, Inc.

Controls in the cab of Alco's latest A-unit passenger locomotive are within easy reach of the engineer.



General Electric Co.

GE builds a complete line of switchers for industrial purposes. Above, a 77-ton unit outshopped for service on the Chilean State Railway.

railway motor-cars for several years.

Things were pretty quiet until 1932. Then Union Pacific ordered from Electro-Motive a radically different type of passenger train operated by a 600-horsepower engine burning a low-cost distillate.

The M-10,000, or *City of Salina,* as it was later known, was a small three-car articulated train, looking a little like today's Talgos. It had speed, and the very sight of it suggested modernity. Built of light-weight aluminum and streamlined, its interiors were the latest in luxurious modern decoration.

About the same time the Burlington ordered a similar train, the *Pioneer Zephyr,* powered by a 600-horsepower diesel.

Both trains were completed in 1934, and both made spectacular runs. Other *City* trains followed. Public reaction was quick and enthusiastic. It soon became clear that the railroads couldn't afford to ignore the diesel-electric much longer.

There was one hitch. The new articulated streamliners were, for all practical purposes, single units. Unless the roads were prepared to scrap all existing passenger units—an unlikely circumstance—some alternative would have to be found—a separate diesel unit, say, which could be hooked onto the front of heavy standard equipment. This would call for more power, but Electro-Motive had the answer. Speed had brought the diesels onto the main line after a decade of switching in the yards, and now it was up to the builders to keep them there.

By this time General Motors must have decided that as locomotive builders they were well set. Early in 1935,

ground was broken at La Grange, Ill., for a new plant devoted exclusively to diesel locomotive construction. A little over a year later, a 100-ton, 600-horsepower switcher built for the Santa Fe emerged, and EMD-GM was in business.

The new plant made it necessary to redesign the diesels for mass production. This meant standardization. And standardization meant the end of the great tradition of exclusive design that had been a hallmark of systems like the Pennsylvania. The railroads squawked, but they bought, and a new series of six, twelve, and sixteen cylinder sizes was adopted for all types of locomotives.

Near the end of 1939, EMD completed the first high-speed freight locomotive, a four-unit 5400-horsepower job. Essentially the old passenger diesel modified to suit its new function, the units were shorter and the engines less powerful. The new model was a huge success.

ALREADY, statistics indicating the diesel's eventual triumph were available. Its fuel costs were said to be lower than the steam locomotive's. It could start faster. It could be maintained and serviced more quickly and easily. It could make desert runs without stopping for water, and its availability was something phenomenal.

A single diesel could run without relief from Chicago to Los Angeles, a trip on which six or eight steamers might be required. The new locomotive even tended to reduce maintenance-of-way costs, since it didn't pound the tracks as heavy steam locomotives did. As the use of diesels became more widespread, passenger trains, in some instances, began moving faster and faster, and the number of ton-miles per hour began to climb.

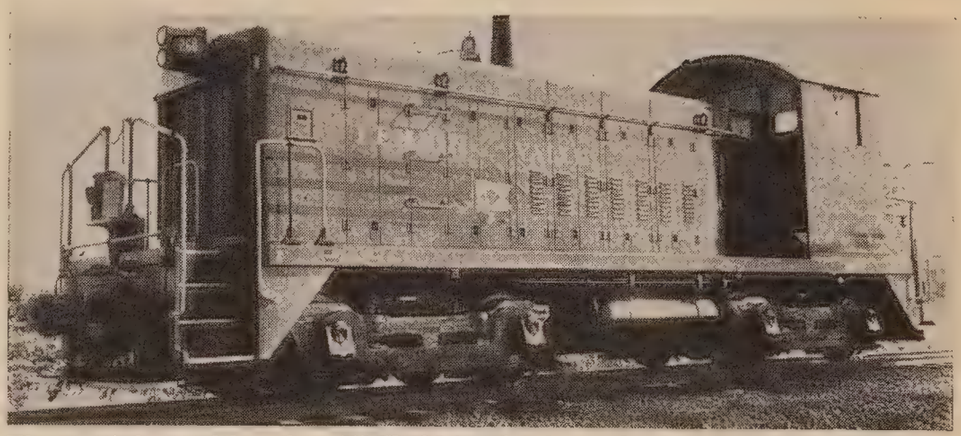
But the triumph was slow in coming. As far as Richard Dilworth, EMD's presiding genius was concerned, the steam locomotive was a has-been since 1926. But nobody knew it then.

The Depression hit the big locomotive companies hard. Lacking the support which General Motors' monolithic structure gave Electro-Motive, they were understandably cautious about gambling heavily on an un-

Union Pacific

Multiple operation brings these Fairbanks, Morse goats up to 2400 hp.

Reading uses seven of these FM 2400 hp. road switchers in freight service.



The switchers, like this EMD-GM job, have been most popular type.

Fairbanks, Morse & Co.

This goat, sister to one at top of page, looks like a different model in Milwaukee Road colors. FM switchers are rated at 1200 hp.

Shelby F. Lowe, Rail Photo Service

"Building block" concept is illustrated in this three-unit A-B-A combination of EMD freight power shown at Howell Yard, Atlanta, Ga.

The Lackawanna's *Phoebe Snow* keeps as soot-free as ever with this 4500 hp. General Motors double-unit passenger locomotive on the head end.

Jersey Central Lines

The all-diesel Jersey Central maintains her tradition on the New York & Long Branch with this sleek freight model built by EMD-GM.

proven form of power. Once the worst seemed to be over, however, Baldwin made a few overtures toward the diesel trade.

In 1936, following the introduction of the *City* trains, Baldwin produced a 600-horsepower switching locomotive, the 62,000, although this one was never sold. However, the company built more 660 and 900-horsepower switchers as well as a 900-horsepower transfer locomotive. These it promptly sold. Baldwin was beginning to get the feel of the thing at last. When World War II broke, it launched a standard line of 660-horsepower transfer and switching locomotives.

In 1931, not long after Ingersoll-Rand dropped out of the locomotive field, Alco-GE, as the combine had now become, abandoned its old box-car construction and came up with a high, narrow-hooded switcher with a short cab at one end. This design was abandoned in 1940 for the lower type in use today. Over the years Alco worked steadily to improve her switchers, raising the original 300-horsepower rating to 1600.

Alco's newest bid in the field is a 2250-horsepower all-purpose freight and passenger model, the DL-600, demonstrated only last year.

In late December, 1939, the first Alco-GE high-speed passenger locomotive rolled out of the Schenectady shops. A streamlined, two-unit glamour girl with a pert sloping nose, she was built for a maximum of speed and power.

When war came in 1941, the War Production Board restricted Alco diesel production to 1000-horsepower units. While Alco was building switchers, EMD was gaining invaluable experience in producing freight units, which had scarcely been out of the experimental stage as the war began.

(Continued on page 64)

Southern Pacific

After a record-breaking storm in 1952, this four-unit EMD freight, equipped with snowplows, threaded her way through cab-high drifts along Southern Pacific's mainline in the high Sierras.

Turbine was compared with Norfolk & Western Y6b class 2-8-8-2 Mallet, built by the road in 1948-'52. The 2300 bested the Y6b in tonnage ratings and fuel savings, but not speed.

the steam-turbine makes good

Tests of the Norfolk & Western's Giant New Single-Unit Coal Burner Show She Has a Bright Future

by I. N. MOSELEY
RESEARCH AND TEST ENGINEER
NORFOLK & WESTERN RAILWAY

NORFOLK & WESTERN'S experimental steam-turbine-electric locomotive was designed and built to burn the country's most plentiful fuel, coal, at a lower cost per horsepower-hour than any other self-contained locomotive presently in use.

Extensive road testing was undertaken to (1) verify the drawbar pull and to establish tonnage ratings, (2) to develop the operating costs in comparison with other locomotives, and (3) to gain experience and data that would lead to simplification and improved performance of future locomotives of this type.

The new turbine was shipped to the railroad for road testing from the Baldwin-Lima-Hamilton plant in Philadelphia. Full scale dynamometer tests were begun July 19 and completed October 2, 1954. The N&W dynamometer car was used in all tests to record drawbar pull, dynamic braking effort, speed, time, location, and distance. Temporary plates were placed over the stoker trough in the coal bunker and all the coal burned was dumped from a weighing bucket into an exposed section of the trough in the operator's cab.

The coal, which was double-screened 2x¼-inch high volatile, was weighed in 200-pound increments, using a balance scale. Representative

◀ Road trials for N&W's big heavy-duty freight engine were made on the rugged Radford and Pocahontas mountain divisions and on the rolling Kenova District of the Scioto Division.

coal samples were taken during each test and a proximate analysis was run on each sample.

Water consumption of the locomotive was measured with the aid of calibration boards at the four corners of the main tender and the auxiliary tender. The auxiliary tender, having a capacity of 16,000 gallons, was employed to eliminate water stops between terminals. This is standard practice with the railroad's present conventional steam locomotives.

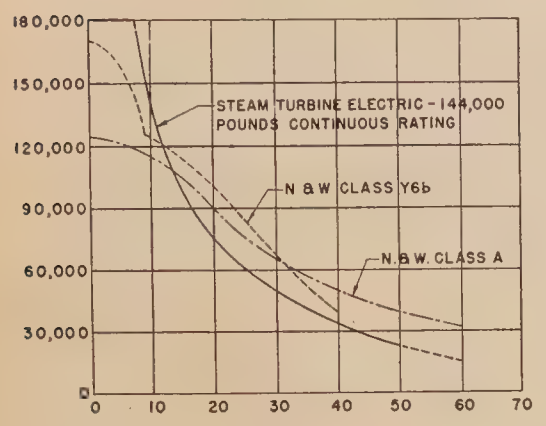


Figure 1. Drawbar-pull curves established in tests. Numbers at bottom and side indicate speed, pull in pounds. Performance varied widely.

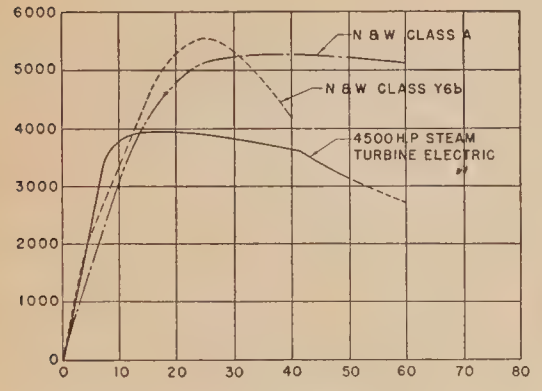


Figure 2. Drawbar-horsepower curves. Turbine does best up to 12 mph. Unloading at 41.5 mph will be corrected in future turbines.

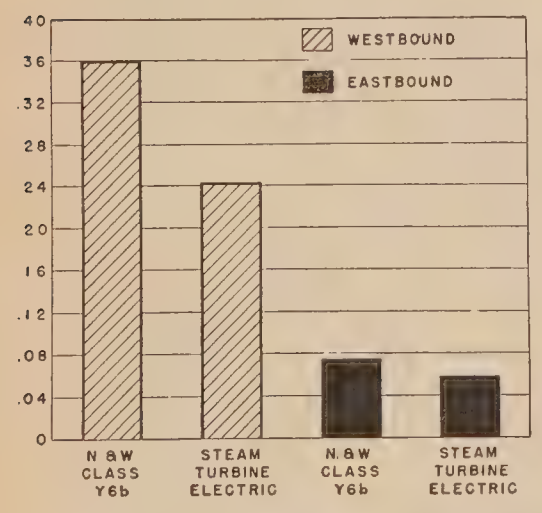


Figure 3. Comparison of fuel costs per thousand gross ton-miles for two locomotives on the Radford District.

Drawbar-pull curves for the three locomotives are shown in Figure 1. The steam-turbine has the highest drawbar pull of the three up to about 12 miles per hour, while the Class Y6b has a higher pull than the steam-turbine at speeds above 12. The Class A has a higher pull than the turbine at speeds above about 13.5 miles per hour.

Notice that there is a drop in the turbine's drawbar pull at speeds above about 41.5. There are no transitions in the traction-motor connections on the turbine locomotive, and only shunting of the traction motor fields.

The turbine normally operates at constant horsepower, and its speed is controlled by the torque requirements of the generators up to the maximum turbine speed of 8000 rpm, which is controlled by the turbine governor. The generators reach their maximum voltage after the last stage of field shunting has been made and the turbine has reached the maximum speed allowed by the governor. This point is reached at a locomotive speed of about 41.5 miles per hour.

Any increase in speed will increase the back electromotive force of the traction motors, and since the generators are operating at maximum voltage, the current to the traction motors will be decreased so that constant horsepower is not maintained. This decrease in power at speeds above about 41.5 miles per hour is evidenced by a lower steam flow to the turbine as well as a lower boiler firing rate.

Figure 2 shows the drawbar-horsepower curves for the three locomotives. These curves show, in a different form, the same general comparison as the drawbar-pull curves. The steam-turbine-electric locomotive has

(Continued on page 57)

Class A locomotive like No. 107 was used in trials, averaged better in gross ton-miles per hour based on running time, lost out on fuel costs.

Kent W. Cochrane

RIDE DOWN MEMORY LANE

On the Nostalgic Branford You'll Have as Much Fun as You've Ever Had, but You'll Work for It, Too

by E. JAY QUINBY

PRESIDENT, BRANFORD ELECTRIC RAILWAY

HAVE YOU ever thought of taking a trip into the past? One way of pulling that trick is to run a real railway as an operating museum. Ride the Indian Valley Line through the Big Rock Candy Mountains into the Land of Dreams-Come-True.

Yeah, it can be done. We're doing it here at Short Beach, Connecticut, with a juice outfit. Come over and join us! But if you think it's all fun and no toil, you'll be surprised. Running a life-sized pike is as full of tough jobs as a wart-hog is full of warts. Even before you can turn a wheel, you'll have to sweat through various forms of laborious effort.

Let me tell you about our pet project, the Branford Electric Railway. This line was folding and about to be torn up when a group of ardent rail-fans took it over. Back in 1945 the Connecticut Company, operating a flock of trolley cars, got permission to abandon rails and operate buses on the public macadam. But we stepped in and established the line—in per-

Railway maintenance and repair is back-breaking work. Doubt it? Try lifting a tie sometime or a length of rail.

You learn by doing. Here Branford members use pikes and scissors to set up a pole in a freshly dug hole.

petuity, we hope—as an operating museum.

We ran a few cars onto the property from the connecting tracks of the Connecticut Company's New Haven lines. We also purchased direct current from the company at 600 volts—while it lasted. Furthermore, we brought in other cars from distant points by railroad to New Haven. There we transferred them to the trolley tracks, running them onto our right-of-way on their own wheels.

Fine, so far! But those conveniences were short-lived. First we were deprived of our track connection when the Connecticut Company discontinued its line to East Haven and we soon learned how much it cost to hire low-bed trucks to bring in the antique cars we were rescuing. The mere loading and unloading cost a fortune, plus the transportation by highway. But these expenses had to be met before we could ride down Memory Lane.

Next we lost our economical source of direct current. We tried using a motor-generator set, which cost plenty, converting the available alternating current to our d.c. requirements. For the stand-by charges we paid more than for the juice we consumed.

Then we acquired a gasoline-electric generator set which we mounted in a big, electric, freight motor-car. That worked all right when it chose to work at all, which wasn't too often. With the jobs of overhauling, installing, and repairing such equipment, we found little time left for actual railroading.

A major problem was the rehabilitation of our antique trolleys. Between the ravages of weather and the destruction caused by vandals, we were fighting an endless battle. We needed carbarns to protect the cars. Also a resident custodian. We couldn't hang up new copper wire as fast as thieves tore it down and made off with it. They even swiped copper rail bonds and some of our rail!

In 1949 we acquired a metal carbarn, in 1954 we built another, and we are building a third.

Meanwhile, James Burchard, a genial desert rat from Death Valley, strolled onto the Connecticut landscape. Jim had read about our plight in *Railroad Magazine* and decided to solve some of our problems by joining the organization. He is now our resident custodian. A good one, too. We haven't had any trouble with thieves or vandals since he arrived. Being a partially disabled veteran, Jim walks with a cane—one that packs a formidable wallop!

WE CLEARED UP the power situation by acquiring a big diesel-generator set from the Boston & Maine, but it needed overhauling before it could go into service. Ray Williams, our master mechanic, is a diesel expert from the New Haven. Under his direction, we organized a team of apprentices, took the filthy machine apart, and fully rebuilt it.

There was dancing in the streets, so to speak, the day we got that job finished and shot the line hot. Wheels sparked on rusty rails—and the line has been running ever since.

But we also had much road maintenance work to do—work that had been deferred too long by the Connecticut Company before we took over. Ties were rotted so badly that you could have extracted spikes with your bare fingers! Rail joints had drifted apart. The steel girders of Rock Quarry bridge were rusting away and needed replacement. Poles toppled by gales and brush fires had left our wire dangling here and there.

We turned to these tasks with a will. George Kuhn, chairman of our

Rare old LaClede trolley, rescued from blowtorch, was hauled by low-bed truck from Brooklyn to BERA.

This old West Virginia interurban car, which was built by Jewett in 1904, is now being restored at Short Beach.

board, supervised a track gang. The novices accepted direction from the experienced rails in our outfit. They learned how to do back-breaking jobs and like 'em.

But certain members of the Branford Electric Railway Association whose chief interest lay in rehabilitating cars felt irked by the amount of labor diverted into line repairs and maintenance.

"Let's get busy on the cars before they fall to pieces," these men protested. "You can't run a railway without decent rolling stock."

"Sure you can't," retorted the maintenance gang, "but if we don't redouble our efforts on the track and overhead we won't have any railway at all."

The jobs facing us could have occupied a hundred able-bodied fellows, but our active working force numbered only a few dozen, and even they could not devote more than their week-ends to the many tasks demanding attention. BERA members are not exactly gentlemen of leisure. Like other typical Americans, they earn their bread and butter by putting in five days a week at it. Unlike typical Americans, they "relax" by working on a railway during Saturdays and Sundays.

More than a dozen professions and many trades are represented in our list of active members. Several members are railroad men. One is a bus driver. I have tamped ballast with bankers and dug holes with clergymen. We're proud of our Memory Lane and willing to struggle for it.

Relatively few passengers, even railfans, have a clear idea of the electrical and mechanical equipment to be found beneath the deck of an electric railway car. Among the jobs involved are routine servicing of motor-brushes, keeping gears and pinions properly greased, packing journal boxes, adjusting brake rigging, and replacing brake-shoes. With these jobs I became familiar in my days of employment by North Jersey Rapid Transit.

You have the electric compressor, cylinder, governor, and reservoir system to contend with on cars equipped with air brakes, most of which are underneath the body. In multiple-unit

(Continued on page 60)

Bob Presbrey

Complying with train orders, work extra 01 goes into the hole for former Connecticut Company 2530 at Meadow Lark. BERA is a single-track line.

Central of Georgia Magazine

Crew dispatcher Harold J. Conway, shown on the job in Savannah, began working for the Central of Georgia when he was 17. Crew callers or call boys, he says, belong to the past, for today telephoning helps streamline job of rounding up men. Dispatcher's duties include keeping detailed records of train runs.

INFORMATION BOOTH

ASK BARBARA: Railroad questions are answered here every month by our research expert — as many as space permits. Top priority is given to subjects that seem to be of wide general interest. Address Miss Barbara Kreimer, *Railroad Magazine*, 205 E. 42nd Street, New York 17, N. Y. No replies will be sent by mail.

1

Question *What are the highest and lowest points on the Southern Pacific?*

Answer According to the United States Geodetic Survey, the highest point on the SP is near Summit, Calif., at milepost 193.0 on the westward track of the Overland Route, where the top of rail elevation is approximately 6972 feet above sea level. Lowest points are at Pope, milepost 651.1, and Wister, milepost 660.1 where top of rail elevation is about 194 feet below sea level. The SP has 144.43 miles of road below sea level. These include 62.95 miles on the Los Angeles-Yuma main line from a point west of Indio to a point west of Iris; 41.23 miles on the Niland to Calexico main line, from Niland to a point west of Calexico; 27.46 miles on the Sandia branch, Calipatria to Holtville; 12.79 miles on the Westmorland branch, Calipatria to Westmorland.

2 *What are the duties of a crew dispatcher?*

A crew dispatcher lists trains to be run and the men assigned them. At 8 a.m. he lines up the board for the following 24 hours, and then summons the entire operating group—engineers, firemen, conductors, flagmen, brakemen, baggage-masters, and yard men. A complete report which he keeps on arrivals and departures of trains determines the crewman's time schedule. The dispatcher also keeps records on all switch and road engines that are out of service because of repairs.

When new crew jobs are created or vacancies show on the board, bulletins to that effect are sent out to the various division points. As bidders then report for the jobs, the caller selects the best qualified applicants and assigns them to incomplete crews.

Because his work involves all regulations under which the men work, a crew caller must necessarily have a thorough knowledge of train contracts with the labor organizations.

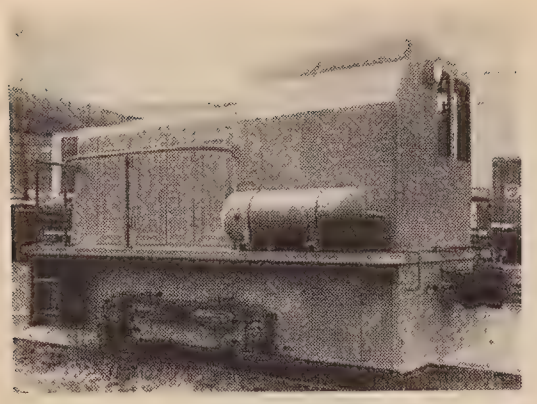
3 *Do all locomotive cabs have windows?*

Yes, so far as we know, but General Electric has just built a diesel-electric locomotive which has a windowless side. The unit, currently used in a by-product coke plant of the Allied Chemical & Dye Corp., was designed so that the operator might be protected from the heat of incandescent coke. The 25-ton, 150-hp. locomotive is equipped with an extra large compressor, extra air reservoir capacity, and air dumping equipment for a coke-quenching car.

This is not the first time a "blind

Richard V. Steinheimer

The Southern Pacific probably covers a wider range of altitude than any other U. S. road, ranging from sun-baked sands to the high Sierras. Shown beyond the palms is a freight at Brawley, Calif., 115 feet below sea level.



General Electric

General Electric diesel, cab with blind side, works at Ashland, Ky.

side" locomotive has appeared. In the early days of railroading a few engines were built with windowless cabs, an example of which was the *Betsy Jane*, operating on the Santa Cruz road in 1875.

4 *I would like a brief history of the Alton.*

Few roads its size can boast as many historical firsts as the old Chicago & Alton, now part of the Gulf, Mobile & Ohio. It was a record-making pioneer, expanding despite river-traffic competition. The first carrier to offer dining-car service, the Alton also introduced sleeping cars. The first complete sleeper was included in the famous Lincoln Funeral Train which ran in 1865 from Chicago to Springfield. In 1879, the C&A built America's first steel bridge, spanning the Missouri River at Glasgow, Mo.

Originally known as the Alton & Sangamon, the road was planned to join the fertile farming region around Springfield with the Mississippi River at the river port of Alton. This stretch was completed in 1851. During the 50's, the new enterprise eked out a precarious existence and managed to extend its tracks to Bloomington, Ill., and thence to Joliet where connection was made with the Chicago & Rock Island, thus giving access to Chicago. Because there were no rail lines between Alton and St. Louis, the Alton operated boats to link these two points. The Alton also provided the first service between Chicago and St. Louis.

After ten years, during which time the name of the road changed frequently, the management was confronted with financial difficulties and could not meet its payroll. The employes went on strike, pushing the company to the wall. A state commission reorganized the line, which became the Chicago & Alton, and leased to it the Joliet & Chicago.

Between 1864 and 1899, the C&A never failed to pay a substantial dividend. By 1899 it had about 1000 miles in operation. By entering Kansas City, the road now had access to three major rail centers of the Midwest. In 1871 the C&A was hauling more coal into Chicago than any other carrier and only the lake steamers hauled more fuel into the city. The C&A also shipped

Lucius Beebe

Mighty engine *Ann Rutledge* was pride of Alton road, now part of GM&O, during its busy steam days. Named for Lincoln's sweetheart, train was one of few to honor a woman, ran through the President's beloved Illinois.

vast quantities of corn, wheat, and livestock. During this bright period of its career, a picture of the *Alton Limited,* then America's newest and finest train, was taken by a camera twenty feet long, reputedly the largest camera in the world. The final giant plate, made in reproduction process, was 8 feet by 4½ feet, and was exhibited in the Paris Exposition.

By the end of the century, several major rail systems, impressed with the C&A's prosperity, wanted to add it to their own lines. After much negotiation, the Alton was sold to a syndicate headed by E. H. Harriman, and in 1904 it passed into the joint control of the Union Pacific and the Rock Island. Later, the Rock Island gained control and sold the C&A to the Clover Leaf (Toledo, St. Louis & Western). The C&A did not flourish under the new setup, however, and funds from Harriman failed to keep it from bankruptcy. The once-money-making line went into receivership in 1922, and in 1929 was sold under foreclosure to the B&O, at which time its name became officially the Alton. Later came another receivership, from which in 1947 it emerged as part of the expanding and prosperous Gulf, Mobile & Ohio.

5 *Who was "Mile-a-Minute" Murphy?*

Charles M. Murphy set an unusual speed record by pedaling a bicycle for a mile in 57 and 4/5 seconds on a boarded-over section between the steel rails of the Long Island Rail Road. Paced by a special fast train on June 30, 1899, Murphy started from Maywood, L. I. The wooden runway had been laid down for 2 and 3/8 miles. As a further aid to the bicyclist, a large hood had been built from the rear end of a coach coupled to the engine which preceded him. This hood, extending outward about five feet, reduced wind resistance.

After his sensational ride, Murphy joined the New York police force to help organize a motorcycle squad. He died just a few years ago. So far as we know, his spectacular record has never been broken.

6 *What is the meaning of the initials EMD and DF, appearing on many boxcars?*

EMD means Electro-Motive Division of General Motors. DF means "damage free" and identifies cars specifically built for carrying fragile or breakable materials. Such cars have an underframe, so built as to allow the car body to slide a little. Restrained by springs, it therefore is exposed to less shock during movement, jarring and sudden stopping.

A. L. Andrews and Will H. Locke

The *Betsy Jane* had two blind sides. She was the first steam engine to enter Santa Cruz, Calif., her maiden trip being a gold run from Watsonville.

7 *What is the definition of a "bolster"?*

According to the *Locomotive Cyclopedia,* it is a beam placed across the frame of a tender truck to receive, through the center plate, the weight of the tender, and transfer it to the truck frame and wheels through the springs on which it is carried. A similar bolster is placed transversely on the under side of the tender sills, over the center of each truck, and is called a body bolster. It transfers the weight through the center plates to the truck bolster. Two-wheel engine front trucks also have bolsters, which are often combined with the journal boxes.

8 *What is meant by the railroad term "kick"?*

This applies to switching. It is the act of pushing a car or cars at speed ahead or behind an engine, and then suddenly cutting the car or cars loose from the engine while the brakes are applied quickly to the engine, thus allowing the cars to be kicked free.

9 *I have seen a reference to "new look" in freight cars. What does that mean?*

Some roads are restyling their freight cars by paint design and lettering. For example, the Pennsylvania is dressing up its equipment with effective touches. Now identified by a large keystone emblem shadowed to produce a third-dimensional impression, the Pennsy cars display large and more clearly defined numbers and letters.

Covered hopper cars, carrying bulk materials which must be protected from rain and snow, used to be particularly drab. Company artists and painters have now refashioned them in brighter colors.

10 *Some time ago, while visiting Puget Sound, I saw what looked like a huge bridge span being moved on barges. I was called away on business and never learned what actually happened. I believe it was a Great Northern operation. Could you tell me about it?*

The project you refer to was very likely the placing of a 775-ton swing draw span on Puget Sound in June, 1953. This was done by the Great Northern despite the ebb and flow of ocean tides. The building of the new span, accomplished within a 12-hour period, took place on falsework beside a pier on Seattle's Duwamish Waterway. The entire construction, transportation, and installation were brilliantly coordinated.

Long Island Rail Road

Cyclist Charles Murphy made famous mile ride on plankway over Long Island track, a world record.

Pennsylvania Railroad

Before and After. Bold new styling of paint design and lettering which give "new look" to Pennsylvania boxcars, is contrasted here with the old. Large letters and bright keystone emblem are outstanding changes.

When the riveting was completed and part of the bridge machinery installed, the giant span was placed on 120-foot barges at low tide and was floated out into the bay toward the bridge site, 5½ miles south of Anacortes. Shortly after it was delivered, builders went to work on finishing touches, while barges carried off the original span.

Great Northern engineers say that the operation was more economical and more quickly managed than if it had been handled by conventional methods.

11 *How are boxcars built?*

Your question is too complex to be answered here. It may interest you to know that a new giant press, designed for turning out parts of PS-1 boxcars, has been installed at the Michigan, Ind., plant of the Pullman-Standard Mfg. Co. This machine weighs 400,000 pounds and insures uninterrupted production of the cars' steel ends, side sheets, and other parts. The foundation for the press is 17 feet deep and 20 by 27 feet wide.

12 *What is a railroad jeep?*

This is General Motor's Electro-Motive's general purpose, all-round unit, simpler and less expensive than regular passenger and freight locomotives. It can drop a train on the main line, work on a sidetrack, go back and pick up the train, and get in the clear to carry out a meet order. Able to work its way around a station, the jeep can go easily in both directions. It can also be hooked onto a work or wreck train.

Great Northern Railway

Large bridge span was successfully moved by Great Northern on barges from Seattle to site at Swinonish Slough on Puget Sound. Tugs pushed giant load for 80 miles and guided it through hazardous waters at Deception Pass.

13 *Why can't the throttle of a steam engine be permanently opened wide and the cutoff alone be used?*

Railroad officials have wished this could be done, for it would force the engineer to work his locomotive at high efficiency. However, it is not practical. It would strain the valve gear, and make starting a train very difficult. The reverse lever would have to be pushed down into the corner under a full head of steam.

14 *What is a train-performance calculator?*

This is a machine invented by Pennsylvania's assistant electrical engineer Spencer V. Smith. It tells quickly how any train is likely to perform on a certain track. The 8-foot-high, 4-foot-wide assemblage of knobs, dials, wires, and motors can figure out in advance what schedule a train could make with a given load or what load could be hauled on a given schedule.

Heretofore, with pencil and paper this took about 40 hours. Smith's device computes with a key electrical circuit in a machine. One voltage represents locomotive pulling power. This is bucked by opposite voltages for the retarding effect of grades and curves, braking at station stops, and other resistance. The final voltage moves a pen which draws a line showing how far the train would go in any time period.

By setting 24 knobs, the operator "tells" the machine a train's characteristics, and then follows the moving pen which maps the trip.

15 *What exactly is meant by "commodity rate"?*

A commodity rate is a special freight rate (usually lower than the class rate for the item being shipped), which affects only a specific type of merchandise consigned between two designated terminals.

RUNNING EXTRA

WE recently published an item on whistle posts in this department. which prompted a great flood of mail. In describing the posts we mentioned that, so far as we knew, there were none left in the United States. We have learned, however, through letters from alert readers, that there are many whistle posts still in use on roads all over the country.

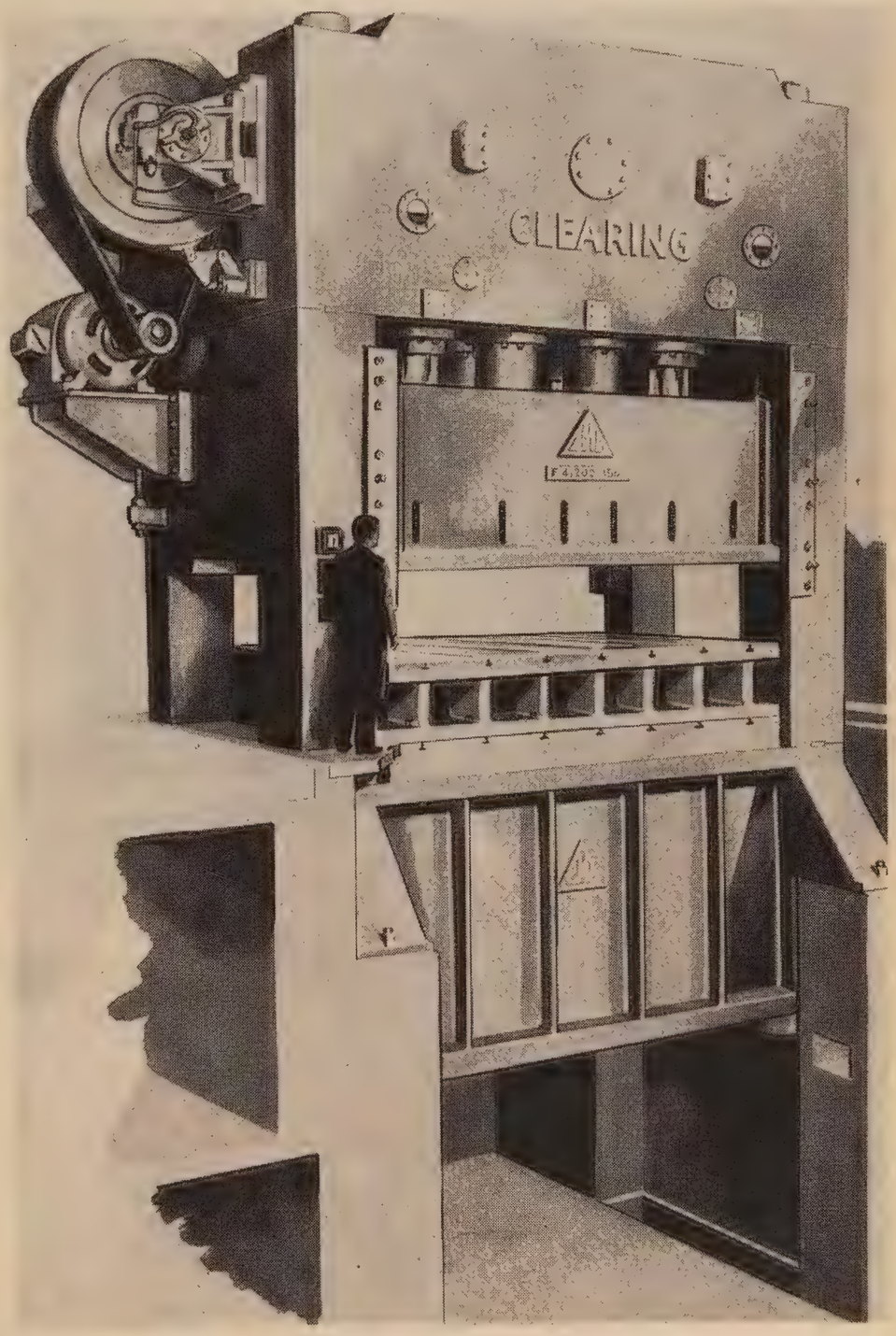
Allan Vaughn, Oelwein, Iowa, writes that these posts are placed on either side of grade crossings, and are identified by the letter W placed above the letter X. More detailed information comes from R. G. Nugent, 243 Main St., Dansville, N. Y., who says that there are several different types of such sign posts. The most common, he adds, is the standard highway crossing post, although there are station mile posts marked "Station, one mile" which call for one long blast, and junction posts which call for the same whistle. Many roads use temporary posts, placed in advance of work gangs, Mr. Nugent continues, which also indicate appropriate blasts. The Southern, the Buffalo & Susquehanna, the Buffalo, Rochester & Pittsburgh, and the Lehigh Valley lines are a few on which our correspondent tells us he has seen these rail signs.

More posts can be found on the Erie, Pennsy, and Jersey Central, according to C. Hieter Bossard, Box 75, Lafayette College, Easton, Pa., who says, however, many are without the painted lines.

Eugene O. Kiefer, 438 Third St., Red Wing, Minn., tells us he thought all railroads in the Midwest still used whistle posts at certain points.

Several months ago one of our readers, Russell A. Smith, asked for information on a Delaware & Hudson head-on collision in 1903. In response to this inquiry, we have had a long letter from William Taxlin, retired D&H engineer, who recalls the accident and knew the members of the crew working the run. He writes that between Putnam and Dresden, N. Y., about thirteen miles north of Whitehall terminal, a freight train, which was in a siding was waiting for a northbound local passenger No. 7 train to pass. The passenger train was carrying green signals for a light engine which was following it. After No. 7 had gone by the siding, the freight having observed no signalling, started to pull out and start on its way to Whitehall. It was immediately hit by the approaching light engine. Our correspondent adds that Engineer Henry Collins, Fireman Frank More, and Brakeman Gordon Ryans, two of whom were sons of railroad men, were killed in the crash. In the investigation which followed, we are told, it was proved that the engineer of No. 7 had not blown signals as it passed the Putnam siding. For further details on the story, we suggest readers write to William Taxlin, c/o The Home for Aged and Disabled Railroad Employes of America, 929 So. St. Johns Ave., Highland Park, Ill. Retired Engineer Taxlin, incidentally, now 81, served on the D&H for nearly 50 years.

Some general information is wanted on the Arcadia & Betsey River Railroad in the Greater Winnipeg Water District, by Edward F. DeVito, 28 Dean Avenue, Warehouse Point, Conn. The line was abandoned some time ago, but some of our history fans may know something of its one-time operations. •



Tremendous new press built for manufacturing of boxcar parts sets high standards for production efficiency. Excavation for its foundation covered an area big enough for a three-car garage or a small railroad depot

Forced from the cab by an angry hogger, Matt hit the station platform at Poplar Lodge,

Matt Fenn Was Running Away from Memories He Hated, Running Away from Himself, and He Kept on Running Until He Reached the End of

the long road

by JACK DERAGON

ILLUSTRATED BY D. B. RASMUSSEN

and the big Mike roared past. The answer he'd been seeking still evaded him.

THE FIRST THING Matt Fenn saw on the station platform at Stone Creek as he swung off the manifest freight was a girl in a neatly tailored tweed suit. She had red hair and clear blue eyes, and she was clamping both hands to her thighs to keep the train-wind from lifting her skirt. The young fellow thought he smelled perfume but he wasn't quite sure.

"Right over there," she nodded, raising her voice above the roar of the train. "That's Mr. Carlin's office. He's the chief dispatcher, and he's looking for men."

"And you?" Matt asked.

The blue eyes turned to steel.

"You seem to know your way around," he went on pleasantly, "but how'd you guess I was a lightning slinger?"

"It's written all over you," she said.

The westbound local ground to a stop in a whirl of flying cinders. Matt watched the girl climb aboard. She glanced back and Matt waved. There was no response. The operator shrugged, and angled for the door marked "Dispatcher's Office." He pushed it open and clomped up the bare wooden stairs.

The chief must have sensed that Matt was a good man applying for a job, for his face brightened. Operators were in demand just then on the Dominion Central.

Answering a question, "Boomer?" Matt shook his head, noting curiously that the chief had the same color of hair and eyes he'd seen outside.

(Continued on page 65)

Beebe-Clegg Collection

The *Gold Coast* in Virginia & Truckee yards, Carson City, Nev., a few years ago.

JOURNEY'S END

Beebe-Clegg Collection

Beebe pours for Clegg aboard the *Gold Coast.* Drawing room has marble fireplace, Venetian mirrors, crystal chandeliers, Turkey carpets. Car also contains two staterooms with showers, dining room, servants' quarters.

THE LAST of the once-numerous rococo private railroad coaches, Lucius Beebe's and Charles Clegg's celebrated *Gold Coast,* has reached the end of the line. Displaced from her home at Carson City, Nevada, when the opulent Virginia & Truckee was abandoned about five years ago, the car will end her days in the museum of the West Coast Chapter of the Railway & Locomotive Historical Society. But her operating days are not entirely over. She will still be used occasionally for pageants, anniversaries, and other civic occasions.

Built in 1907 by the Central of Georgia, the car was bought by Beebe and Clegg in 1947 from the Georgia Northern, where, numbered 100, she had been by tradition the president's car. The new owners had her redesigned to duplicate the Victorian lavishness of Central Pacific President Leland Stanford's famous *Stanford,* destroyed by fire. With her looped and fringed draperies, wine cellar, crystal chandeliers, and elaborately decorated dining room, she couldn't be duplicated today for less than $100,000. The car comes equipped with furnishings, tableware, wine glasses, kitchen equipment, bed and table linen including a complete service of Irish table linen dating from the time of the car's building in the early part of the century.

Not to be confused with railroad-owned business cars, the *Gold Coast* was privately owned. During Beebe and Clegg's proprietorship, she rode over every main line of consequence in the West, and from Santa Fe to Seattle.

With her passing, another chapter in railroad history has ended.

STEAM LOCOMOTIVES

Number	Builder	Date	Builder's Number	Type	Boiler Pressure	Grate Area	Tractive Effort	Drivers	Cylinders	Engine Weight
CLASS E										
SP 504	Schen.	1913	53043	4-6-2	200	53	39,700	75	25x28	260,000
SP 506	Schen.	1913	53045	4-6-2	200	53	39,700	75	25x28	260,000
SDP 508	Schen.	1914	54516	4-6-2	200	53	39,700	75	25x28	260,000
SDP 509	Schen.	1914	54517	4-6-2	200	53	39,700	75	25x28	260,000
SP 512	Schen.	1916	55540	4-6-2	200	53	39,700	75	25x28	260,000
SP 513	Schen.	1916	55541	4-6-2	200	53	39,700	75	25x28	260,000
SP 514	Schen.	1916	55542	4-6-2	200	53	39,700	75	25x28	260,000
SP 516	Schen.	1916	56294	4-6-2	200	53	39,700	75	25x28	260,000
CLASS E-3										
SDE 600	Schen.	1930	68516	4-6-2	260	70.3	51,500	75	25x28	341,700
SDE 601	Schen.	1930	68517	4-6-2	260	70.3	51,500	75	25x28	341,700
SDE 602	Schen.	1930	68518	4-6-2	260	70.3	51,500	75	25x28	341,700
CLASS I-1										
S 101	Schen.	1910	48948	4-6-0	200	46	30,940	63	21x26	179,000
S 102	Schen.	1910	48949	4-6-0	200	46	30,940	63	21x26	179,000
S 103	Schen.	1910	48950	4-6-0	200	46	30,940	63	21x26	179,000
S 104	Schen.	1910	48951	4-6-0	200	46	30,940	63	21x26	179,000
S 106	Schen.	1910	48953	4-6-0	200	46	30,940	63	21x26	179,000
S 222	Schen.	1910	47043	4-6-0	200	46	30,940	63	21x26	179,000
S 338	Schen.	1906	39402	4-6-0	200	46	30,940	63	21x26	179,000
S 341	Schen.	1906	39405	4-6-0	200	46	30,940	63	21x26	179,000
S 343	Schen.	1906	39407	4-6-0	200	46	30,940	63	21x26	179,000
S 344	Schen.	1906	39408	4-6-0	200	46	30,940	63	21x26	179,000
S 345	Schen.	1906	39409	4-6-0	200	46	30,940	63	21x26	179,000
S 353	Schen.	1907	42629	4-6-0	200	46	30,940	63	21x26	179,000
S 356	Schen.	1909	45915	4-6-0	200	46	30,940	63	21x26	179,000
S 357	Schen.	1909	45916	4-6-0	200	46	30,940	63	21x26	179,000
S 358	Schen.	1909	45917	4-6-0	200	46	30,940	63	21x26	179,000
S 359	Schen.	1909	45918	4-6-0	200	46	30,940	63	21x26	179,000
S 361	Schen.	1910	47040	4-6-0	200	46	30,940	63	21x26	179,000
S 363	Schen.	1910	47042	4-6-0	200	46	30,940	63	21x26	179,000
CLASS I-2										
S 383	Schen.	1910	47047	4-6-2	200	47	27,988	75	21x28	212,000
S 384	Schen	1910	47048	4-6-2	200	47	27,988	75	21x28	212,000
S 385	Schen	1910	48954	4-6-2	200	47	27,988	75	21x28	212,000
CLASS J-A-C										
SEP 396	Schen.	1913	52703	2-8-2	200	63	62,000	64	27x32	307,000
SEP 398	Schen.	1913	52705	2-8-2	200	63	62,000	64	27x32	307,000
SE 399	Schen.	1913	52706	2-8-2	200	63	62,000	64	27x32	307,000
SE 400	Schen.	1914	54520	2-8-2	200	63	62,000	64	27x32	307,000
SE 402	Schen.	1914	54522	2-8-2	200	63	62,000	64	27x32	307,000
SE 404	Schen.	1914	54524	2-8-2	200	63	62,000	64	27x32	307,000
SEP 406	Schen.	1916	55562	2-8-2	200	63	62,000	64	27x32	307,000
SEP 407	Schen.	1916	55563	2-8-2	200	63	62,000	64	27x32	307,000
SEP 408	Schen.	1916	55564	2-8-2	200	63	62,000	64	27x32	307,000
SEP 409	Schen.	1916	55565	2-8-2	200	63	62,000	64	27x32	307,000
SEP 411	Schen.	1916	55567	2-8-2	200	63	62,000	64	27x32	307,000
SEP 413	Schen.	1916	56285	2-8-2	200	63	62,000	64	27x32	307,000
SEP 414	Schen.	1916	56286	2-8-2	200	63	62,000	64	27x32	307,000
SEP 416	Schen	1916	56288	2-8-2	200	63	62,000	64	27x32	307,000
SEP 417	Schen.	1916	56289	2-8-2	200	63	62,000	64	27x32	307,000
SEP 418	Schen.	1916	56290	2-8-2	200	63	62,000	64	27x32	307,000
SEP 419	Schen.	1916	56291	2-8-2	200	63	62,000	64	27x32	307,000
SEP 420	Schen	1916	56292	2-8-2	200	63	62,000	64	27x32	307,000
SEP 421	Schen.	1916	56293	2-8-2	200	63	62,000	64	27x32	307,000
SEP 440*	Schen.	1916	55608	2-8-2	200	63	62,000	64	27x32	307,000

*Acquired from Chicago & North Western where she was numbered 2363.

CLASS J-2										
SE 423	Schen.	1919	61035	2-8-2	200	70.3	62,000	64	27x32	320,000
SE 424	Schen.	1919	61036	2-8-2	200	70.3	62,000	64	27x32	320,000
SE 425	Schen.	1919	61037	2-8-2	200	70.3	62,000	64	27x32	320,000
SE 426	Rich.	1921	62609	2-8-2	200	70.3	62,000	64	27x32	320,000
SE 427	Rich.	1921	62610	2-8-2	200	70.3	62,000	64	27x32	320,000
SE 428	Rich.	1921	62611	2-8-2	200	70.3	62,000	64	27x32	320,000
SE 429	Rich.	1921	62612	2-8-2	200	70.3	62,000	64	27x32	320,000
SE 430	Rich.	1921	62613	2-8-2	200	70.3	62,000	64	27x32	320,000
SE 431	Rich.	1921	62614	2-8-2	200	70.3	62,000	64	27x32	320,000
CLASS J-3										
SE 432	Schen.	1926	67091	2-8-2	200	70.3	63,000	63	27x32	333,000
SE 435	Schen.	1926	67094	2-8-2	200	70.3	63,000	63	27x32	333,000
SE 437	Schen.	1926	67096	2-8-2	200	70.3	63,000	63	27x32	333,000
CLASS K-1										
S 107	Schen.	1911	50126	4-6-0	180	46	33,400	63	23x26	186,000
S 108	Schen.	1911	50127	4-6-0	180	46	33,400	63	23x26	186,000
S 110	Schen.	1913	52621	4-6-0	180	46	33,400	63	23x26	186,000
S 112	Schen.	1911	50128	4-6-0	180	46	33,400	63	23x26	186,000
S 125	Schen.	1913	52622	4-6-0	180	46	33,400	63	23x26	186,000
S 183	Schen.	1913	52623	4-6-0	180	46	33,400	63	23x26	186,000
S 184	Schen.	1913	52624	4-6-0	180	46	33,400	63	23x26	186,000
S 201	Schen.	1913	52625	4-6-0	180	46	33,400	63	23x26	186,000
S 203	Schen.	1913	52626	4-6-0	180	46	33,400	63	23x26	186,000
S 204	Schen.	1913	52627	4-6-0	180	46	33,400	63	23x26	186,000
S 230	Schen.	1911	50129	4-6-0	180	46	33,400	63	23x26	186,000
S 235	Dunk.	1912	50947	4-6-0	180	46	33,400	63	23x26	186,000
S 236	Dunk.	1912	50948	4-6-0	180	46	33,400	63	23x26	186,000
S 238	Dunk.	1912	50950	4-6-0	180	46	33,400	63	23x26	186,000
S 239	Dunk.	1912	50951	4-6-0	180	46	33,400	63	23x26	186,000
S 240	Dunk.	1912	50952	4-6-0	180	46	33,400	63	23x26	186,000
S 243	Dunk.	1912	50953	4-6-0	180	46	33,400	63	23x26	186,000
S 244	Dunk.	1912	50954	4-6-0	180	46	33,400	63	23x26	186,000
S 245	Dunk.	1912	50955	4-6-0	180	46	33,400	63	23x26	186,000
S 246	Dunk.	1912	50956	4-6-0	180	46	33,400	63	23x26	186,000
S 249	Schen.	1913	52628	4-6-0	180	46	33,400	63	23x26	186,000
S 261	Schen	1913	52629	4-6-0	180	46	33,400	63	23x26	186,000
S 262	Schen.	1913	52630	4-6-0	180	46	33,400	63	23x26	186,000

A. Robert Johnson

Doubleheader on the Omaha Line is pulled by Nos. 415 and 424.

Locomotives of the Chicago, St. Paul, Minneapolis & Omaha

THE OMAHA LINE (Chicago, St. Paul, Minneapolis & Omaha) had its genesis on April 1, 1863, when the Tomah & Lake St. Croix was incorporated in Wisconsin. This formed the backbone of what became the CStPM&O in 1880. A few years later the Chicago & North Western purchased a controlling interest in the Omaha's capital stock and added 1,147 miles of railroad to the system. The C&NW gave the Omaha entrance to the Twin Cities and connections with lines into Canada as well as deeper penetration into rich farm lands of the northwest. It now has 1,617 miles of track. Railfans who dislike to see motive power become standardized are glad the Omaha has kept its identity. •

Chicago, St. Paul, Minneapolis & Omaha CONTINUED

CLASS M-1

	9	Schen.	1912	50930	0-6-0	190	21.85	24,624	51	18x24	131,500
	18	Schen.	1912	50932	0-6-0	190	21.85	24,624	51	18x24	131,500
S	45	Baldw.	1913	39375	0-6-0	200	21.85	25,920	51	18x24	129,800

CLASS M-2

	46	Schen.	1917	57369	0-6-0	190	32.7	39,100	51	21x28	173,000
	47	Schen.	1917	57470	0-6-0	190	32.7	39,100	51	21x28	173,000
	50	Schen.	1917	57373	0-6-0	190	32.7	39,100	51	21x28	173,000
	54	Schen.	1917	57377	0-6-0	190	32.7	39,100	51	21x28	173,000

CLASS M-3

S	75	Schen.	1919	61333	0-6-0	190	33	39,100	51	21x28	163,500
S	76	Schen.	1919	61334	0-6-0	190	33	39,100	51	21x28	163,500
S	77	Schen.	1919	61335	0-6-0	190	33	39,100	51	21x28	163,500
S	78	Schen.	1919	61336	0-6-0	190	33	39,100	51	21x28	163,500
S	79	Schen.	1919	61337	0-6-0	190	33	39,100	51	21x28	163,500
S	80	Schen.	1919	61338	0-6-0	190	33	39,100	51	21x28	163,500
S	81	Schen.	1919	61339	0-6-0	190	33	39,100	51	21x28	163,500
S	82	Schen.	1919	61340	0-6-0	190	33	39,100	51	21x28	163,500
	83	Rich.	1921	62615	0-6-0	190	33	39,100	51	21x28	165,000
	84	Rich.	1921	62616	0-6-0	190	33	39,100	51	21x28	165,000
	85	Rich.	1921	62617	0-6-0	190	33	39,100	51	21x28	165,000
	86	Rich.	1921	62618	0-6-0	190	33	39,100	51	21x28	165,000

CLASS M-5

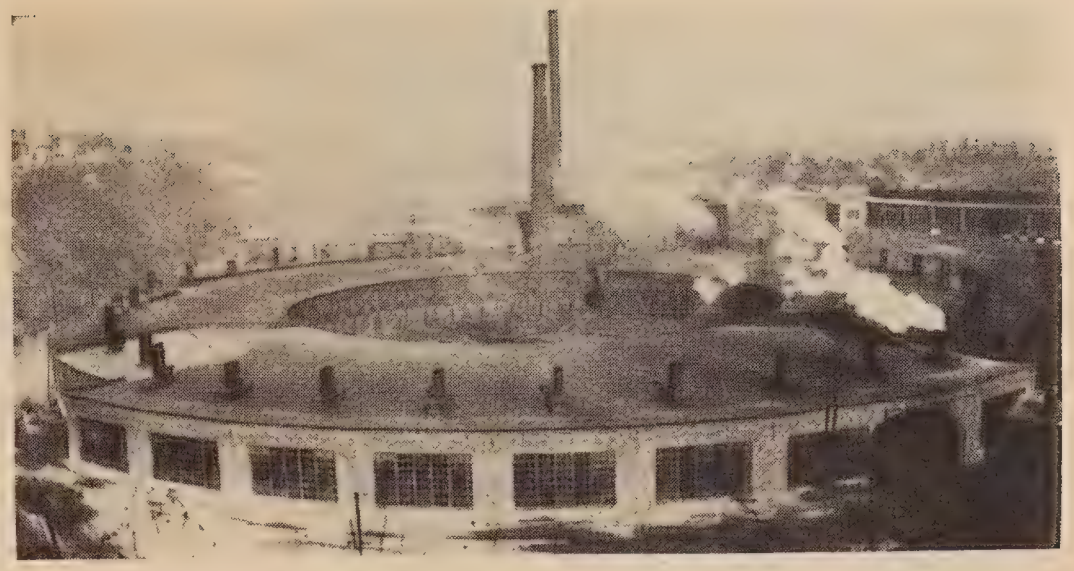
SP	60	Baldw.	1928	60543	0-8-0	200	47	58,400	51	25x28	239,000
SP	61	Baldw.	1928	60544	0-8-0	200	47	58,400	51	25x28	239,000
SP	62	Baldw.	1928	60545	0-8-0	200	47	58,400	51	25x28	239,000
SP	63	Baldw.	1928	60546	0-8-0	200	47	58,400	51	25x28	239,000
SP	64	Baldw.	1928	60547	0-8-0	200	47	58,400	51	25x28	239,000
SP	65	Baldw.	1928	60548	0-8-0	200	47	58,400	51	25x28	239,000
SP	66	Baldw.	1928	60549	0-8-0	200	47	58,400	51	25x28	239,000
SP	67	Baldw.	1928	60550	0-8-0	200	47	58,400	51	25x28	239,000

CLASS Z

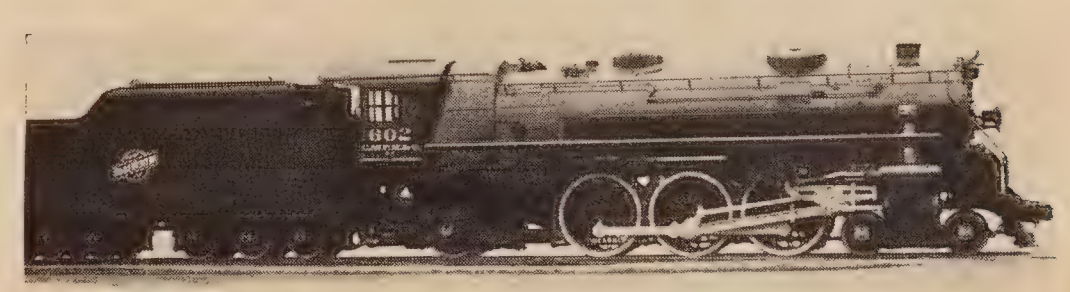
S	218	Schen.	1913	53092	2-8-0	185	53	51,557	61	25x32	243,500
S	219	Schen.	1913	53093	2-8-0	185	53	51,557	61	25x32	243,500

DIESEL-ELECTRIC LOCOMOTIVES

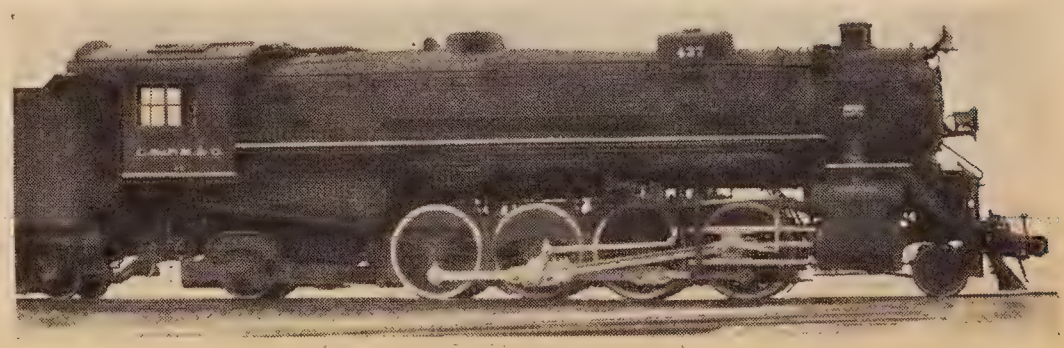
Number	Builder	Date	Builder's Number	Type	Horsepower	Tractive Effort	Wheel Diameter	Cylinders	Engine Weight
					SWITCH				
10	Whit.	1943	60284	B-B	179 at 1000 RPM	22,000	33	8-5 x8	84,100
55	EMD	1940	1194	B-B	600 at 800 RPM	49,000	40	6-8½x10	187,500
56	Alco	1944	72842	B-B	660 at 740 RPM	49,750	40	6-12½x13	189,000
57	Alco	1944	72843	B-B	660 at 740 RPM	49,750	40	6-12½x13	189,000
58	BLW	1945	71522	B-B	660 at 625 RPM	49,750	40	6-12¾x15½	191,500
59	BLW	1945	71753	B-B	660 at 625 RPM	49,750	40	6-12¾x15½	191,500
68	BLW	1945	71574	B-B	660 at 625 RPM	49,750	40	6-12¾x15½	191,500
69	Alco	1948	75889	B-B	660 at 740 RPM	49,750	40	6-12½x13	189,000
70	EMD	1940	1195	B-B	1000 at 800 RPM	62,000	40	12-8½x10	241,000



Clouds of steam drift over old CStPM&O roundhouse at Sioux City, Ia., in this shot taken in 1933. Unlike most roundhouses, it was almost a complete circle. Beyond the narrow entrance of the building are engine shops.



Powerful 602, Class E-3, Pacific type, was built by Schenectady in 1930.



A sleek modern line identified this Mikado, Class 200, built in 1926.

71	BLW	1949	73904	B-B	660 at	625 RPM	49,150	40	6-12¾x15½	189,100
87	BLW	1944	70149	B-B	1000 at	625 RPM	60,000	40	8-12¾x15½	232,000
88	BLW	1945	72027	B-B	1000 at	625 RPM	60,000	40	8-12¾x15½	232,000
89	BLW	1945	72028	B-B	1000 at	625 RPM	60,000	40	8-12¾x15½	232,000
90	Alco	1940	69216	B-B	1000 at	740 RPM	57,500	40	6-12½x13	219,000
91	Alco	1944	72025	B-B	1000 at	740 RPM	57,500	40	6-12½x13	219,000
92	Alco	1944	72026	B-B	1000 at	740 RPM	57,500	40	6-12½x13	219,000
93	Alco	1944	72049	B-B	1000 at	740 RPM	57,500	40	6-12½x13	219,000
94	FM	1947	L1171	B-B	1000 at	800 RPM	60,000	40	6-8⅛D.-2x10	230,000
95	FM	1948	10L40	B-B	1000 at	800 RPM	60,000	40	6-8⅛D.-2x10	230,000
96	FM	1948	10L41	B-B	1000 at	800 RPM	60,000	40	6-8⅛D.-2x10	230,000
97	FM	1948	10L42	B-B	1000 at	800 RPM	60,000	40	6-8⅛D.-2x10	230,000
98	FM	1948	10L43	B-B	1000 at	800 RPM	60,000	40	6-8⅛D.-2x10	230,000
99	BLW	1949	74088	B-B	1000 at	625 RPM	57,500	40	6-12¾x15½	219,200
100	BLW	1949	74089	B-B	1000 at	625 RPM	57,500	40	6-12¾x15½	219,200
101	Alco	1953	80621	B-B	1000 at	740 RPM	57,875	40	6-12½x13	224,000
126	EMD	1951	14663	B-B	800 at	800 RPM	57,625	40	8-8½x10	223,800
127	EMD	1951	14664	B-B	800 at	800 RPM	57,625	40	8-8½x10	223,800
128	EMD	1951	14665	B-B	800 at	800 RPM	57,625	40	8-8½x10	223,800
129	EMD	1951	14666	B-B	800 at	800 RPM	57,625	40	8-8½x10	223,800

*for each engine—total: 358hp

ROAD SWITCH

h 150	FM	1951	16L278	C-C	1600 at	850 RPM	71,750	42	8-8¼D.-2x10	273,000
h 151	EMD	1951	14667	B-B	1500 at	800 RPM	60,000	40	16-8½x10	229,700
h 152	EMD	1951	14668	B-B	1500 at	800 RPM	60,000	40	16-8½x10	229,700
h 153	EMD	1951	14669	B-B	1500 at	800 RPM	60,000	40	16-8½x10	229,700
h 154	EMD	1951	14670	B-B	1500 at	800 RPM	60,000	40	16-8½x10	229,700
h 155	EMD	1951	14671	B-B	1500 at	800 RPM	60,000	40	16-8½x10	229,700
h 156	EMD	1951	14672	B-B	1500 at	800 RPM	60,000	40	16-8½x10	229,700
h 157	EMD	1952	16891	B-B	1500 at	800 RPM	61,000	40	16-8½x10	231,000
h 158	EMD	1952	16892	B-B	1500 at	800 RPM	61,000	40	16-8½x10	231,000
h 159	EMD	1952	16893	B-B	1500 at	800 RPM	61,000	40	16-8½x10	231,000
hcA-160	EMD	1952	16894	B-B	1500 at	800 RPM	61,000	40	16-8½x10	231,000
hcA-161	EMD	1952	16894	B-B	1500 at	800 RPM	61,000	40	16-8½x10	231,000
hA-162	Alco	1952	80137	B-B	1600 at	1000 RPM	61,775	40	12-9x10½	234,500
hU 163	Alco	1952	80138	B-B	1600 at	1000 RPM	63,850	40	12-9x10½	233,400
hUAA-164	Alco	1952	80139	B-B	1600 at	1000 RPM	64,125	40	12-9x10½	234,500
hA 165	Alco	1953	80519	B-B	1600 at	1000 RPM	61,250	40	12-9x10½	232,500
hA 166	Alco	1953	80520	B-B	1600 at	1000 RPM	61,250	40	12-9x10½	232,500
UhA 167	Alco	1953	80521	B-B	1600 at	1000 RPM	64,125	40	12-9x10½	238,000
g 168	FM	1953	16L704	C-C	1600 at	850 RPM	71,500	42	8-8⅛D.-2x10	272,500
g 169	FM	1953	16L705	C-C	1600 at	850 RPM	71,500	42	8-8⅛D.-2x10	272,500
g 170	FM	1953	16L706	C-C	1600 at	850 RPM	71,500	42	8-8⅛D.-2x10	272,500
g 171	FM	1953	16L707	C-C	1600 at	850 RPM	71,500	42	8-8⅛D.-2x10	272,500
g 172	FM	1953	16L708	C-C	1600 at	850 RPM	71,500	42	8-8⅛D.-2x10	272,500

FREIGHT

AQ 6500-A	EMD	1949	8578	B-B	1500 at	800 RPM	59,000	40	16-8½x10	224,800
AQ 6500-C	EMD	1949	8579	B-B	1500 at	800 RPM	59,000	40	16-8½x10	224,800
AQ 6501-A	EMD	1949	8580	B-B	1500 at	800 RPM	59,000	40	16-8½x10	224,800
AQ 6501-C	EMD	1949	8581	B-B	1500 at	800 RPM	59,000	40	16-8½x10	224,800
AQ 6502-A	EMD	1949	8582	B-B	1500 at	800 RPM	59,000	40	16-8½x10	224,800
AQ 6502-C	EMD	1949	8583	B-B	1500 at	800 RPM	59,000	40	16-8½x10	224,800
A 6503-A	EMD	1950	10558	B-B	1500 at	800 RPM	58,150	40	16-8½x10	221,600
A 6503-C	EMD	1950	10559	B-B	1500 at	800 RPM	58,150	40	16-8½x10	221,600
A 6504-A	EMD	1950	10560	B-B	1500 at	800 RPM	58,150	40	16-8½x10	221,600
A 6504-C	EMD	1950	10561	B-B	1500 at	800 RPM	58,150	40	16-8½x10	221,600
A 6505-A	EMD	1950	10562	B-B	1500 at	800 RPM	58,150	40	16-8½x10	221,600
A 6505-C	EMD	1950	10563	B-B	1500 at	800 RPM	58,150	40	16-8½x10	221,600

PASSENGER (2-unit)

AQ-6001-A	FM	1947	28586	A1A-A1A	2000 at	850 RPM	109,700*	40	10-8¼x10x10	591,200*
AQ-6001-B	FM	1947	28587	A1A-A1A	2000 at	850 RPM	109,700*	40	10-8¼x10x10	591,200*
AQ-6002-A	FM	1947	28588	A1A-A1A	2000 at	850 RPM	109,700*	40	10-8¼x10x10	591,200*
AQ-6002-B	FM	1947	28589	A1A-A1A	2000 at	850 RPM	109,700*	40	10-8¼x10x10	591,200*

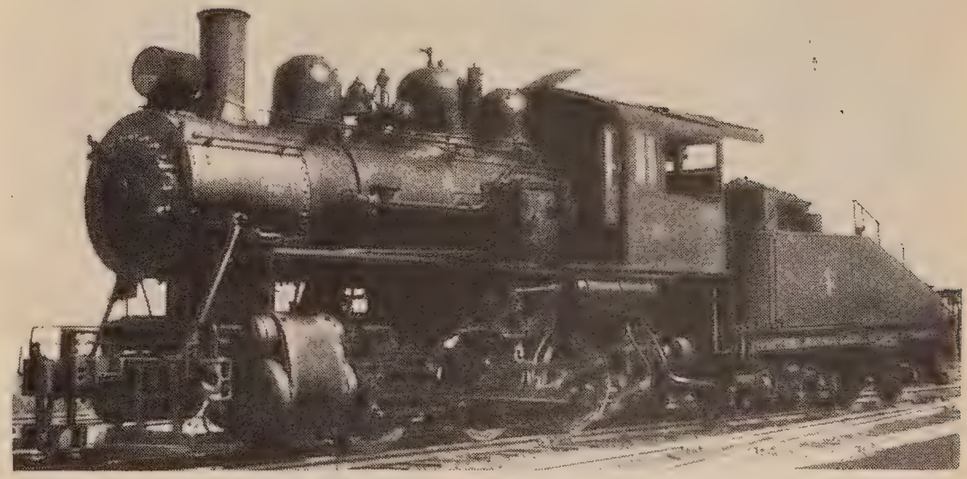
*for two units.

Abbreviations: A—Automatic Train Stop; D—Franklin Booster; E—Stoker; P—Coal Pusher; Q—Train Control; S—Superheater; U—Steam Heat; c—Coupler Stop; g, h—M. U. Control, will M. U. with all Units of Same Letter; EMD—Electro-Motive Division, General Motors; Alco—American Locomotive Co.; BLW—Baldwin Locomotive Works; FM—Fairbanks-Morse; Whit.—Whitcomb Locomotive Co.

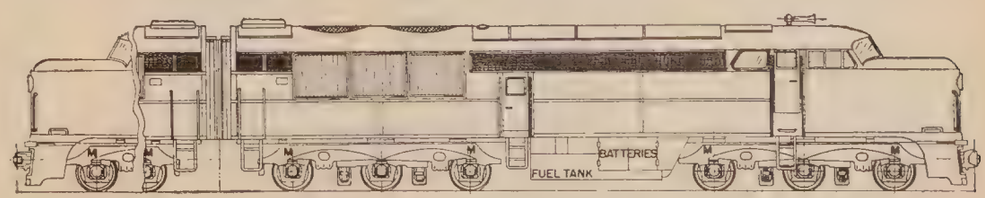
CStPM&O diesels are yellow with green roofs and black underframes.

This roster was provided by J. C. Stump, Chief Mechanical Officer, CStPM&O.

Typical of vanishing I-1 Class ten-wheelers was No. 334, now scrapped.



Retired many years ago, No. 4, Class M-1, was six-wheel switching engine.



Mechanical department diagram of 6001-A,B and 6002-A,B. An A1A-A1A type, 4000 horsepower, the unit was built by Fairbanks, Morse. Designed with double opposed pistons, each unit can be operated singly or in multiple.

Texas & Pacific Topics

Ladies, locomotives, gentlemen lined up for photographer that June afternoon when Nos. 5 and 6 met head-on.

WHEN THE *CANNON BALLS* MET

Nobody Could Stop Those Two Texas & Pacific Passenger Trains from Making a Cornfield Meet a Few Miles Beyond Jefferson, Texas

THAT AFTERNOON of June 4, 1903, when a Texas & Pacific train, *Cannon Ball* No. 5, pulled into Jefferson in East Texas, nobody could have realized that disaster waited no more than twenty minutes away. Not the engineer nor his fireman. Not the conductor. Certainly not the Texas ladies who lifted their long skirts and climbed the steps into the hot dusty coaches and made their way down the aisle.

Up front, the conductor was getting impatient. No. 5 was scheduled to meet the eastbound *Cannon Ball* No. 6 at two P.M., and there was no sign of her. The minutes ticked by. The skipper growled at the hogger, and the hogger snorted at the tallowpot, who leaned laconically out of the cab and spat.

Then the signal came, and No. 5 began to roll slowly over that single-tracked line toward Woodlawn, seven miles to the west, where Five would take the passing track for Six to get by.

Back in the coaches, the ladies settled back in their seats, removed their hats, thrust the hatpins neatly in place, and patted the moisture daintily from their brows with lace handkerchiefs. The country outside was moving faster now. A warm breeze whipped in through the open windows.

When Five pulled out of Jefferson, Six must have been several miles east of Woodlawn, racing to eat up lost time. No. 6 was late already for her two o'clock meet at Jefferson, and she'd have to hurry if she were going to get there before Five left for Woodlawn.

Five was racing, too—to get to Woodlawn before Six headed for Jefferson.

On the *Cannon Balls* came, their pistons racing and exhaust trailing wraith-like from their stacks, highballing along that single-tracked line for a cornfield meet!

In the coaches the female passengers fanned themselves and watched the countryside speeding past, green and shimmering in the early June heat.

Then Six swung around a curve into the tangent: Five lay dead ahead. Both crews must have seen each other almost at the same instant. They threw their engines into reverse, jammed on their airbrakes, and jumped.

The passengers were hurled joltingly forward. One of them had time to scream. Another picked up her crushed hat, whimpering with fright.

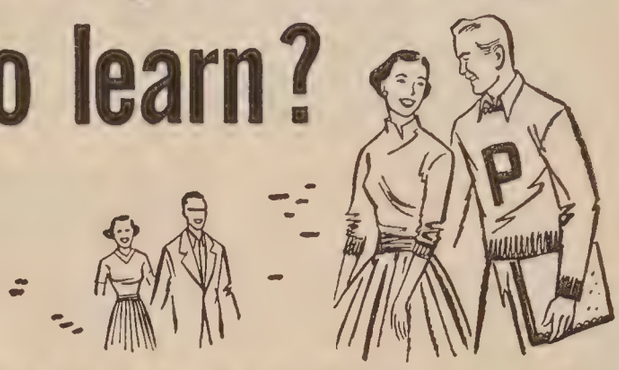
Outside, the crews rushed back to help the injured. The *Cannon Balls* had met—head-on, fitting their boilerheads together like two pieces of piping.

Nobody was killed. Seven were injured, though none seriously, and none of the ladies.

A photographer apparently happened to be aboard, although he may have come with the wrecker or with the light engine that sped to the scene with doctors to bring in the train and its passengers.

The photographer wanted a picture, so the wrecking crew put down their tools and lined up. Three of the ladies straightened their hair, adjusted their hats, and went outside into the sun to get on record as having been there—that day when the *Cannon Balls* met. ●

Are you too old to learn?



not at all, new tests show!

EXPERT SAYS YOU CAN LEARN NEW TRICKS!

New tests, cited by an expert in news stories, show that: your ability to think increases with age; your powers of deduction are greater; your judgment is better.

I. C. S. KNEW IT ALL THE TIME! In the I. C. S. files are thousands of case histories of men and women of every age. Their successes, their promotions, their raises prove that men and women past school age can learn! Listen to A.L.G.* "Up until I took the course, I did what I was told. But now . . . I tell others what to do."

I. C. S. GIVES YOU EXPERT GUIDANCE FREE! Do you have the feeling you're "stuck" in your job? Your trained I. C. S. counselor will appraise your abilities, help you plan for the future. Listen to D.F.K.* "Before enrolling, I was a foundry laborer. Today I am a draftsman, enjoying a ⅓ increase in salary."

IT'S NEVER TOO LATE TO GET STARTED! You study with I. C. S. at home, in your spare time. There's no interference with business or social activity. Famous I. C. S. texts make learning easy. And whatever your age, you're more capable now than you've ever been. But don't delay! Pick your field from the coupon below. Mail the coupon today! We'll send free "success" book, survey of opportunities in your field! *Mail now for 3 free books.*

*Names on request

For Real Job Security—Get an I. C. S. Diploma!

I. C. S., Scranton 9, Penna.

INTERNATIONAL CORRESPONDENCE SCHOOLS

ICS

BOX 78098B, SCRANTON 9, PENNA. (Partial list of 277 courses)

Without cost or obligation, send me "HOW to SUCCEED" and the opportunity booklet about the field BEFORE which I have marked X (plus sample lesson):

ARCHITECTURE and BUILDING CONSTRUCTION
- ☐ Air Conditioning—Refrig.
- ☐ Architecture
- ☐ Architectural Interior
- ☐ Building Contractor
- ☐ Building Maintenance
- ☐ Carpenter and Mill Work
- ☐ Estimating
- ☐ Heating
- ☐ Painting Contractor
- ☐ Plumbing
- ☐ Reading Arch. Blueprints

ART
- ☐ Cartooning
- ☐ Commercial Art
- ☐ Fashion Illustrating
- ☐ Magazine Illustrating
- ☐ Show Card and Sign Lettering
- ☐ Sketching and Painting

AUTOMOTIVE
- ☐ Auto Body Rebuilding
- ☐ Auto Elec. Technician
- ☐ Auto-Engine Tune Up
- ☐ Automobile Mechanic

AVIATION
- ☐ Aeronautical Engineering Jr.
- ☐ Aircraft & Engine Mechanic

BUSINESS
- ☐ Advertising
- ☐ Bookkeeping and Accounting
- ☐ Business Administration
- ☐ Business Correspondence
- ☐ Public Accounting
- ☐ Creative Salesmanship
- ☐ Federal Tax
- ☐ Letter-writing Improvement
- ☐ Office Management
- ☐ Professional Secretary
- ☐ Retail Business Management
- ☐ Sales Management
- ☐ Stenographic-Secretarial
- ☐ Traffic Management

CHEMISTRY
- ☐ Analytical Chemistry
- ☐ Chemical Engineering
- ☐ Chem. Lab. Technician
- ☐ General Chemistry
- ☐ Natural Gas Prod. & Trans.
- ☐ Petroleum Engineering
- ☐ Plastics
- ☐ Pulp and Paper Making

CIVIL, STRUCTURAL ENGINEERING
- ☐ Civil Engineering
- ☐ Construction Engineering
- ☐ Highway Engineering
- ☐ Reading Struct. Blueprints
- ☐ Sanitary Engineering
- ☐ Structural Engineering
- ☐ Surveying and Mapping

DRAFTING
- ☐ Aircraft Drafting
- ☐ Architectural Drafting
- ☐ Electrical Drafting
- ☐ Mechanical Drafting
- ☐ Mine Surveying and Mapping
- ☐ Plumbing Drawing and Estimating
- ☐ Structural Drafting

ELECTRICAL
- ☐ Electrical Engineering
- ☐ Electrical Maintenance
- ☐ Electrician ☐ Contracting
- ☐ Lineman

HIGH SCHOOL
- ☐ Commercial ☐ Good English
- ☐ High School Subjects
- ☐ Mathematics

LEADERSHIP
- ☐ Foremanship
- ☐ Industrial Supervision
- ☐ Leadership and Organization
- ☐ Personnel-Labor Relations

MECHANICAL AND SHOP
- ☐ Gas—Electric Welding
- ☐ Heat Treatment ☐ Metallurgy
- ☐ Industrial Engineering
- ☐ Industrial Instrumentation
- ☐ Industrial Supervision
- ☐ Internal Combustion Engines
- ☐ Machine Design-Drafting
- ☐ Machine Shop Inspection
- ☐ Machine Shop Practice
- ☐ Mechanical Engineering
- ☐ Quality Control
- ☐ Reading Shop Blueprints
- ☐ Refrigeration
- ☐ Sheet Metal Worker
- ☐ Tool Design ☐ Toolmaking

RADIO, TELEVISION
- ☐ Industrial Electronics
- ☐ Practical Radio TV Eng'r'ng
- ☐ Radio and TV Servicing
- ☐ Radio Operating
- ☐ Television Technician

RAILROAD
- ☐ Air Brakes ☐ Car Inspector
- ☐ Diesel Locomotive
- ☐ Locomotive Engineer
- ☐ Section Foreman

STEAM AND DIESEL POWER
- ☐ Combustion Engineering
- ☐ Diesel—Elec. ☐ Diesel Eng's
- ☐ Electric Light and Power
- ☐ Stationary Fireman
- ☐ Stationary Steam Engineering

TEXTILE
- ☐ Carding and Spinning
- ☐ Cotton, Rayon, Woolen Mfg.
- ☐ Finishing and Dyeing
- ☐ Loom Fixi'g ☐ Textile Des'ing
- ☐ Textile Eng'r'g ☐ Throwing
- ☐ Warping and Weaving

MISCELLANEOUS
- ☐ Domestic Refrigeration
- ☐ Marine Engineering
- ☐ Ocean Navigation
- ☐ Professional Engineering
- ☐ Short Story Writing
- ☐ Telephony

Name_____ Age_____ Home Address_____

City_____ Zone_____ State_____ Working Hours_____ A.M. to P.M._____

Occupation_____

Canadian residents send coupon to International Correspondence Schools, Canadian, Ltd., Montreal, Canada. . . . Special tuition rates to members of the U. S. Armed Forces.

TRANSIT TOPICS

by STEVE MAGUIRE

Steve Maguire

PHILADELPHIA Transportation Co. will soon add ninety PCC cars to its fleet of trolleys. Bought from the St. Louis and Kansas City Public Service Companies when abandonments and reductions in service made them superfluous, they will replace older PTC cars, some with more than forty years of service, on routes 10, 11, 34, and 37 of the new West Philadelphia subway-surface line. If the Public Utility Commission approves, they may also be used on route 36.

The new subway, which surfaces near 40th St. and Woodland Ave., is expected to provide faster service into and out of downtown Philadelphia and to relieve surface congestion at several busy intersections along Woodland Ave. The new PCC cars should be reconditioned by summer when the new subway is expected to open.

Besides the PCC cars, PTC will also purchase 343 trolley and gas buses. As a result, about 300 old cars will probably be retired, among them the wooden "nearside" trolleys developed in 1911 by T. E. Mitten of the old PRT. These cars broke with traditional design and loaded at the front instead of the rear.

Although all of PTC's nearside cars now have center doors, they retain the old characteristics of the type used in Buffalo and Chicago as well as Philadelphia. Many of the newer steel center-door cars will also probably be retired.

IN BROOKLYN'S Green-Wood Cemetery stands a white marble monument to an era of transportation that has vanished and a touching remembrance of a man's love for his wife that has outlived the years.

The stone shows Jane Griffith, a slender woman of forty-one years, standing on the steps of her cottage with her dog beside her. Wisteria climbs over the wall, and at the front gate is her husband, Charles Griffith, carrying a light coat over his arm and wearing a swallow-tail jacket and stovepipe hat. Beside the Griffith cottage a Sixth Ave. horsecar waits. The driver leans out as if urging Mr. Griffith to hurry and get aboard.

Mr. Griffith did, that morning of August 3, 1856, and then death came between him and, as the tombstone puts it, "Jane, My Wife." P. Piatti, a sculptor, was assigned to study the house, a photograph of Mr. and Mrs. Griffith, and to arrest in stone that last moment they saw each other alive, while the horsecar waited.

PLANS of the Los Angeles Transit and Metropolitan Coach Lines for converting their electric routes to buses came to a halt recently when, in the midst of a week-long smog, the Los Angeles Board of Public Utilities and Transportation denied the operators' applications for abandonment. The California Public Utility Commission had already okayed the LATL request.

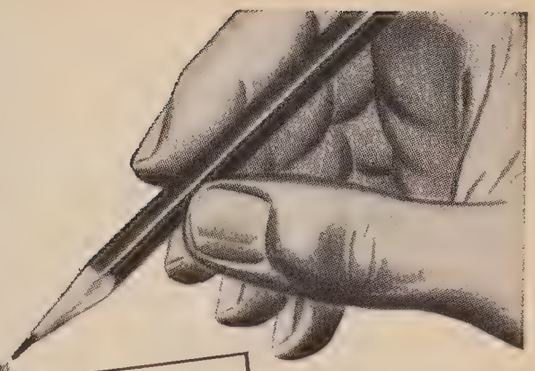
Despite the operators' claims that buses would provide better and faster

(Continued on page 62)

C. J. Collins.

California Street Cable Car crosses an intersection in the heart of San Francisco's Chinatown. Recent abandonment proposals raised a big hullabaloo.

Can you spot the BIG LOSER on this scorecard?



★ TRANSPORTATION SCORECARD ★

	RAILROADS	INTERCITY TRUCKS	INLAND WATERWAY CARRIERS	AIRLINES	INTERSTATE BUSES
Does carrier build and maintain the "roadway" which it uses?	YES	NO	NO	NO	NO
Does carrier pay property taxes on its "roadway" for support of the general services of government?	YES	NO	NO	NO	NO
Does carrier meet all its true costs instead of being helped by tax money?	YES	NO	NO	NO	NO
Is carrier compelled to maintain routes and services which do not pay their own way?	YES	NO	NO	SEE NOTE #1	NO
Are carrier's rates regulated by government agencies?	YES	SEE NOTE #2	SEE NOTE #3	YES	YES

#1. Any mail-carrying commercial airline which operates at a loss receives additional Federal subsidy to cover its deficit.

#2. Only 38% of intercity truck transportation is regulated, in part, by the Interstate Commerce Commission.

#3. Only 12% of inland water transportation service is regulated to some extent. Water carriers enjoy special protection from railroad competition.

Look closely – it's YOU!

Most of the things you enjoy in your daily life – your home, your car, your clothes, the food you eat – are available to you in such quantity because America enjoys the world's greatest system of mass transportation. And the better that system works, the better for *you*.

But when that system is not permitted to work at its best, it is *your* loss.

As you can see from this scorecard, only the railroads among these transportation agencies are meeting all their true costs without help from tax money.

And yet, railroads are subject to such laws and regulations, both in their rates and in their services, that they are not allowed to compete with other forms of transportation on an equal basis.

This costs *you* money in two ways – in higher taxes and in higher *real* costs of transportation.

You can help get lower *real* costs – and lower taxes, too – by supporting measures, state and national, which will put all forms of transportation on an equal basis – and which will give America's railroads freedom to compete.

Association of American Railroads

WASHINGTON 6, D. C.

The Curse of Alpine Tunnel

"As Sure As They Try To Open the Pass Up Again," Dad Said, "Somebody Is Gonna Get Himself Killed."

TRUE TALE BY
GILBERT A. LATHROP

E. J. Haley

Today the tunnel probably looks pretty much as it did sixty years ago. Water drips endlessly from the redwood timbers, and white moss covers its walls.

IN MID-WINTER of 1895, a rumor started going around the Denver, Leadville & Gunnison that, come spring, trains would be running again through the long-abandoned Alpine Tunnel on the line between Como and Gunnison, Colorado.

"They're crazy," 'Dad' Martinis told his gangling, sandy-haired brakeman, Elmer England. "They're out of their fool heads."

Dad had been a hogger on the DL&G long enough so that when he said something Elmer had to listen respectfully. The two men had been working together ever since 1890 on the stub run which operated three days of the week between Gunnison and Baldwin, and on the other three days between Gunnison and Pitkin. A couple of times when Elmer had first come to the line, they had even run as far as Alpine Tunnel Station, half a mile or so from the abandoned bore. Since then, however, snow drifts and slides had made the line impassable.

"It ain't gonna hurt my feelin's none if they never open the danged thing again," Dad went on. "When us white men robbed the Ute Indians of their summer huntin' grounds, they laid a curse on all this high country, and on Alpine Pass in particular."

Dad had been moaning and groaning about that Indian curse ever since he and Elmer made their first trip together, so Elmer wasn't about to take the old man's ravings too seriously.

"I've heard somethin' about a curse," Elmer said. "But I never was much of a believer in them things."

"Well," Dad affirmed stoutly, "I worked through Alpine Tunnel from the day she was drilled. I know every rail joint between Como an' Gunnison. I've seen that curse workin'. How about the Woodstock Slide?"

Elmer knew about the snow slide which had taken thirteen lives back in 1884.

"Or that cave-in. What would you call that?"

Elmer knew about that too. It had happened in 1888. Nobody'd been killed, but the fall had been bad enough to close Alpine Pass, and maybe that was disaster enough to blame on a curse. But Elmer had the idea things like snow slides and cave-ins were pretty much what you ought to expect when you railroaded through country as rugged as the Colorado

Rockies. But there was no point in arguing with Dad. Elmer shrugged and let the old man have his way.

"Why it's the dumbest fool thing I ever heard of," Dad said, grumbling all the more because Elmer didn't agree with him. "Just as sure as Alpine Pass is opened up, somebody is gonna get killed. Maybe even a whole train of passengers."

"It'll put a bunch of men back to workin'," argued Elmer. "There'll be helper engines workin' out of Pitkin again. There'll be section men, telegraph operators at Alpine Tunnel Station, and a gen'ral hum of industry all along the line."

"Hrumpf!" Dad snorted. Luckily they had to stop then and unload some freight at Hinkel's, and, before Dad had a chance to say anything more, Elmer dropped off and spotted the merchandise car.

Reopening the tunnel would, sure enough, be a big job—if they decided to do it. Alpine Pass was the highest railroad pass in all North America—11,612 feet above sea-level at the apex of the tunnel, and its 1805-foot bore, lined through most of its length with prime California redwood, pierced the spine of the continent. Elmer kind of hoped they would reopen it. He was getting tired of watching the same scenery every day, and the prospect, curse or no curse, offered high excitement and adventure.

Not that they weren't a happy little family, the crew on the stub run. He liked them fine. Besides Elmer and Dad, there were Mike Flavin, the conductor, and Mike Byrnes, the fireman. Dad was the patriarch of the crew with a spade beard which flowed across his chest like a silver mist. A keen-eyed old fellow, he loved his engine as other men love their wives.

She was a trim-lined little 22-ton Mason bogie, No. 51, which had originally been numbered 15 and named the *Breckenridge* back in the days before the Denver, South Park & Pacific had been reorganized as the DL&G. Built like fine watches, those Masons were far in advance of their time. Equipped with vestibuled cabs and a form of Walschaerts valve gear, they had single frames extending all the way from the cow-catcher to the rear of the tender. The

OPPORTUNITIES FOR EVERYBODY

Publisher's Classified Department (Trademark)

For classified advertising rates, write to William R. Stewart, 9 South Clinton Street, Chicago 6 (Men.-Mar.) 5

BUSINESS OPPORTUNITIES

IMPORT-EXPORT! OPPORTUNITY, profitable, world-wide mail-order business from home, without capital; or travel abroad. Established World Trader ships instructions for no-risk examination. Experience unnecessary. Free details. Mellinger E61, Los Angeles 24.

I AVERAGE $125 weekly selling books by mail! So can you! Start spare time! Work home! Cooper, 245-XA Taunton, Buffalo, N. Y.

POLICE PATROL WORK. Own your business. Send $2.00 complete operating instructions. Excel Press, Box 2495, Phoenix, Arizona.

MAKE MONEY GROWING miniature trees on your window sill. Free seed and plan. National Nursery, Dept. PD, Inglewood 4, Calif.

HIGHEST PRICES TYPEWRITING, sewing, writing, re-weaving, clipping wanted items from your newspaper. Economy, Rowley, Mass.

FREE FOLIO "UP to $45,000; Unlimited Vacations." No merchandise, equipment. Unknown! Work home—sparetime! Haylings-DM1, Carlsbad, Calif.

START VENETIAN BLIND Laundry. Profitable lifetime business. New Machine. Free booklet. L. K. Co., 442 N. Seneca, Wichita 12, Kansas.

OPERATE PROFITABLE MAIL order business. Write Walter Service, 4159-W East 112th, Cleveland 5, Ohio.

SEND OUT POSTCARDS. Cash daily. Bicorp, 143 Belmont, Belmont, Mass.

60 MONEY-MAKING Ideas. Catalogue Free. Universal, Box 1076-S, Peoria, Ill.

BUY WHOLESALE—25,000 items—Catalog 25c. Matthews, 1474-P6 Broadway, New York City 36.

$150 WEEK—EASY! Start home Venetian Blind Laundry. Revealing book free. BT Co., 101 S. 44th, Philadelphia 4, Pa.

METALIZE BABY SHOES, jewelry, gifts. Bronze, gold, silver. Free Bulletin. Kiktavi, Box 73136, Los Angeles 3.

AGENTS WANTED

MAKE MONEY GIVING away free hosiery! Introduce amazing nylon stockings (guaranteed against runs and snags) and men's-children's hosiery (guaranteed one year) by giving away free trial pairs regardless whether or not final purchase is made! Earn up to $3 hour spare time. Mail postcard today for free samples men's and women's hosiery with complete money-making outfits. Nothing to pay now or later. Absolutely no obligation. Kendex, Babylon 668, N. Y.

PROFITS TO 150% selling finest Everyday Greeting Cards. New 21-Card $1.00 Assortments, unusual Gifts, 100 fast-sellers. Valuable Gift Bonuses. Assortments on approval, Stationery samples FREE! $1.00 Gift Free for prompt action! Creative Cards, 4401 Cermak, Dept. 527-A, Chicago 23.

household WOMAN With Spare Time to try our food and MAN OR products, at home, and supply neighbors. Make good money. Big box of full-size products sent on Free Trial. Blair, Dept. 155NC, Lynchburg, Va.

CASH IN ON Tremendous demand for New Cheap Burglar Alarm for Automobiles, Homes, Stores, Auto Service Stations and other property. 286% profit. Unique sample offer. Northwest Electric Co., 241-C Main, Mitchell, S. Dakota.

WHOLESALE! 8,000 NATIONALLY Famous Products. 30-80% Discounts! Large Catalog. Sensational Business Plans Included. Consolidated Distributors, 21-61 Lafayette, Paterson 15, New Jersey.

SHINE CARS WITHOUT "Polish." New invention. Lightning seller. Cars gleam like mirror. Samples sent on trial. Kristee 136, Akron, Ohio.

BUY WHOLESALE THOUSANDS nationally advertised products at big discount. Free "Wholesale Plan." American Buyers, 629-XA Linden, Buffalo, N. Y.

EARN UP TO $250.00 per week soliciting delinquent accounts. Metro, Box 5887, Kansas City 11, Missouri.

PERFUME BEADS, SENSATIONAL Sellers. Particulars free. Mission, 2328A West Pico, Los Angeles 6, Calif.

MISCELLANEOUS

FREE BOOK ON Arthritis, Rheumatism explains specialized system on non-surgical, non-medical treatment. Write Ball Clinic, Dept. 751, Excelsior Springs, Missouri.

300 BIG MAILS guaranteed. Samples, plans, offers, propositions, twelve months listing, $1.00 (Refundable). Wright Publications, 2272-B Hubbard, Memphis 8, Tenn.

RECONDITIONED TYPEWRITERS, OFFICE machines $25.00 Up. Catalog Free. DixieGraph, King, N. C.

FREE ILLUSTRATED HYPNOTISM Catalogue. Write Hypnotist, 1324 Wilshire, Los Angeles 17W, California.

PERSONAL

BORROW BY MAIL. Loans $50 to $600 to employed men and women. Easy, quick, Completely confidential. No endorsers. Repay in convenient monthly payments. Details free in plain envelope, Give occupation. State Finance Co., 323 Securities Bldg., Dept. C-14, Omaha 2, Nebraska.

"DOLLIE'S DILEMMA" CAPTIVE Cartoon Serial: "Domina" binds, gags, torments "Dollie." Two episodes $5.00; one episode and "illustrated bulletin" $3.00. Gargoyle, Box 478-PC, New York City 10.

WANTED! PERSONS TO claim $3,000,000,000 in unclaimed securities. Information and registration papers $1.00. American Inheritance Research, Box 5340-A, Chicago 80, Illinois.

OWE MONEY? I can help you! 45% saved on expenses! Increase earnings! Send $2.00 for detailed information. M25 Box 807, Hollywood 28, Calif.

PSORIASIS VICTIMS: HOPELESS? New Discovery! Free Trial Offer. Write Pixacol, Box 3583-CM, Cleveland, Ohio.

"INTERESTING MAILS"—25c keeps your mail box full three months. Bentz (Desk K/60), Chatawa, Mississippi.

OLD COINS & MONEY WANTED

$1,000.00 FOR 1894-S Dime. Certain 1913 Nickel $2,000.00. 1901-S Quarter $30.00-$250.00. Hundreds of others worth $5.00-$500.00. Our Complete Illustrated Guarantee Buying Catalogue 25c. Worthycoin Corporation (D-357), Boston 8, Massachusetts.

$10.00 FOR CERTAIN Lincoln pennies, Indianheads $50.00. Booklet showing prices paid, 10c. Lincoln Coins, D-575, Glendale, Arizona.

WE PURCHASE INDIANHEAD pennies. Complete allcoin catalogue 20c. Magnacoins, Box 61-CF, Whitestone 57, N. Y.

BOOKS & PERIODICALS

RARE BOOKS, ART. 24-Sparkling illustrated cartoon booklets $1.00. Catalog 10c. Aladdin Book Co., 210-CM Fifth Avenue, New York 10.

FASCINATING READING—UNUSUAL, revealing. Illustrated booklets, 10—$1.00. Catalogue 10c. Kogan, 1032-X, New York City 8.

MUSIC & MUSICAL INSTRUMENTS

ELECTRIC GUITARS, AMPLIFIERS, wholesale. Free catalog. Carvin MG, Baldwin Park, Calif.

HELP WANTED

OVERSEAS JOBS. Many firms hiring Truck Drivers, Laborers, Clerks, Mechanics, Carpenters, Pipe Fitters, Electricians, Plasterers and other trades. Pay to $1,500.00 monthly. Transportation paid to and from jobsite. Jobs open in USA, Spain, South America, Alaska, Canada, St. Lawrence project and others. Full information of all Contractors with name and address, wage rate both USA and Foreign, hours, living conditions, how to apply for job with application blank mailed to you same day order received for $1.00. Airmail $1.25. Satisfaction guaranteed or money back. Overseas, Box 2274, Dept. 11, Dallas 21, Texas.

"ATTENTION CONSTRUCTION MEN!!" Trades-Laborers—Truck Drivers—Engineers—Supervisors—Clerical—Many Others. Who to Contact for High Paying Jobs. To $1500.00 Monthly. Latest Copyrighted Reports covering 42 Countries, including U. S., St. Lawrence Project, Spain, Far North, Alaska, South America, Europe. Exclusive one year Registration and Advisory Service. Application Forms. Unconditional Money-Back Guarantee of Satisfaction. Write or Wire Today! $2.00. Airmailed $2.25 (COD's Accepted). International Reporter, Box 1047-MJ, St. Louis 1, Missouri.

NEW JOB CATALOG. 56 pages, illustrated. Pay to $240 weekly. Overseas, U. S. A. Detailed opportunities: truck drivers, office construction, guards, laborers, Alaska Cannery workers (hiring 12,500), clerks, others. Wages, overtime, conditions, transportation, Women's opportunities. Catalog, "Firms Seeking Applicants" bulletin, applications, complete, $1. Jobservice Publishers D-15, Box 6, Stevensville, Montana.

$130,000 MONTHLY FOR truck drivers, $1400.00 monthly for carpenters, electricians, plumbers, mechanics, $1200.00 for clerks and laborers. Full information and complete foreign listings, with current information on Spain, Korea, Australia, Alaska & Canada. $1.00. Current information on stateside projects, $1.00. Dept. 10-C, Opportunities Unlimited, 1110 Commerce Bldg., St. Paul, Minn.

FOREIGN U. S. JOBS to $18,000. Many overseas countries. Fare Paid. Skilled-Unskilled Trades, Office. Stamped self-addressed envelope brings reply. Job Opportunities, Waseca 6M, Minn.

FREE INFORMATION AVAILABLE about Foreign and U.S.A. job opportunities paying to $1500 monthly. Write immediately. Dept. 75A National Employment Information Service, 1020 Broad, Newark, N. J.

FOREIGN, LATIN AMERICAN, Alaska, Canada Employment Opportunities. Up-To-Minute "Foreign Service Directory." How-When-Where to apply; firms hiring. $1.00. Global Report, Box 883-PC, Hollywood 28, California.

JOBS ON SHIPS. No experience necessary. Plenty Overtime. For information How to Obtain Merchant Mariners Documents, Send $1.00 to Shipping Information, Box 288 San Pedro, Calif.

FOREIGN EMPLOYMENT CONSTRUCTION Work. If interested in foreign projects with high pay, write Foreign Service Bureau, Personnel Mgr., Metuchen, New Jersey.

SEND POSTCARD FOR Free Money-Making Kit guaranteed direct-from-Mill nylons, lingerie, blouses, men's and children's wear. American Mills, Dept. 451, Indianapolis.

STAMPS

FABULOUS COLLECTION—LARGE U. S. Commemoratives. Only 10c. Approvals. Raymax, 39-BM Maiden Lane New York City 38.

77 DIFFERENT U. S.—25c Approvals. Leonard, 1143 K North Keeler, Chicago 51.

FIRST U. N. Set. Among World's Prettiest. Only 10c. Approvals. Welles, Box 1246-PM, New York City 8.

PICTORIAL PACKET—TRIANGLES, Bi-Colors, etc.—10c! Approvals. Cole, 43-P Rinewalt, Buffalo 21, N. Y.

PATENT ATTORNEYS

INVENTORS WRITE Patrick D. Beavers, Registered Patent Attorney, 1092 Columbian Bldg., Washington 1, D. C.

MALE & FEMALE HELP WANTED

EARN EXTRA MONEY selling Advertising Book Matches. Free Sample Kit furnished. Matchcorp, Dept. PC-29, Chicago 32, Illinois.

A DRESS SHOP in your home. No investment. Liberal sales commissions. Write Bellecraft Fashions, 111 ZA Eighth Ave., New York.

MONEY-MAKING OPPORTUNITIES

SELL TITANIA GEMS: $9.75 Carat Wholesale. More brilliant than diamonds. Free catalog. Diamonite, 1404-P Mitchell, Oakland 1, Calif.

SEND OUT POSTCARDS. Cash daily. Bicorp, 143 Belmont, Belmont, Mass.

EARN MONEY AT Home! Must Have good Handwriting. Write for Details. Atlas, Box 188-D, Melrose, Mass.

EARN SPARETIME CASH at home, preparing mailings for advertisers. Tem-Let, Box 946, Muncie 1, Indiana.

FREE ILLUSTRATED BOOK "505 Odd Successful Businesses." Work home. Pacific-DM-1, Oceanside, California.

PROFITABLE OCCUPATIONS

GROW MUSHROOMS, CELLAR, shed. Spare, full time, year round. We pay $3.50 lb. We paid Babbitt $4165.00 in few weeks. Free book. Washington Mushroom Ind., Dept. 163, 2954 Admiral Way, Seattle, Wash.

PRINTING SPECIALTIES

SELL EVERY BUSINESS and profession unique printed specialties, Christmas letters, envelopes, collection items. Big profits. Tremendous repeat business. We start you without cost. M. P. Brown, Dept. 453, Burlington, Iowa.

AVIATION

AIRLINE PURSERS—18-32 Wanted. Send $1.00 full information, McConnell Purser School, 1030 Nicollet, Minneapolis, Minnesota.

MOVIE FILMS & EQUIPMENT

FREE CATALOG OF 16mm., 8mm. new, used movie films; used 16mm. sound projectors; new 2" x 2" color slides. Blackhawk Films, 1131 Eastin, Davenport, Iowa.

JOKES, TRICKS & PUZZLES

3100 NOVELTIES, TRICKS, Jokes, Gadgets, Funmakers, Hobbies. Catalog 10c. Johnson Smith, D-884, Detroit 7.

CARTOONING & COMMERCIAL ART

"HOW TO MAKE Money with Simple Cartoons"—A book everyone who likes to draw should have. It is free; no obligation. Simply address Cartoonists' Exchange, Dept. 33, Pleasant Hill, Ohio.

HEALTH & MEDICAL SERVICE

FREE BOOK—PILES, Fistula, Colon-Stomach, associated conditions. Newest scientific procedures. Thornton & Minor Hospital, Suite C-314, Kansas City 9, Mo.

WATCH REPAIRING

MASTER WATCHMAKING AT home. Free sample lesson. Chicago School, Dept. PC-35, 2330 Milwaukee, Chicago 47.

MORE CLASSIFIED ON FOLLOWING PAGE

tender was supported by three pairs of wheels, evenly spaced, and the engine had a pony truck and three pairs of drivers. The reach rods from the reverse lever extended across the top of the boiler to the links, which worked the cross heads, giving them a "monkey motion."

EXCITEMENT over the reopening of the tunnel died out gradually as the railroad company gave no indication it was going to do anything about it. By the end of April, the whole project had been almost forgotten.

Then one afternoon a series of messages addressed to various employees of the DL&G in and around Gunnison announced that, effective at once, Alpine Pass was to be reopened to traffic between Como and Gunnison. A crew with a rotary would hammer a trench through the deep drifts on the east side of the Pass, while Dad Martinis and his bogie would do the opening-up of the west side. The two crews, it was thought, would probably meet at the top of the divide.

E. J. Haley

Dad Martinis' bogie as she appeared when she was the Denver, South Park & Pacific 15. Renumbered 51, she carried four men to their graves.

A. L. Pearson

A snowshed protected the western portal from avalanches and snow slides. Here Elmer England and Mike Flavin waited for Oscar in the dark.

And so it was that on a glittering-bright, sun-filled morning early in May, 1895, Dad's bogie, polished until every part of her sparkled, headed east out of Gunnison for the high passes, trailing a tool car and a combination coach. Riding the coach were Conductor Mike Flavin, Brakeman Elmer England, and a small group of laborers, among whom was Oscar Cammann, a husky, whiskered individual who scarcely knew the meaning of fear.

The line to the little helper town of Pitkin, huddled at the base of the towering continental divide, had been kept up, and the bogie and her crew made the twenty-seven-mile run in little more than an hour. There the bogie took on water and went whuffing her diamond-stacked way up the four-percent grade to Alpine Pass. Fireman Mike Byrnes kept the needle on the steam gage pointed at 130 pounds, the maximum pressure.

They encountered very little trouble until they passed Woodstock water tank. Around Woodstock Loop (sometimes called "Sherrod Curve" from nearby Sherrod Spur) were a few soggy, sun-wilted snow banks, smelling musty in the shade of the deep cut, but the crew quickly shoveled them from the tracks.

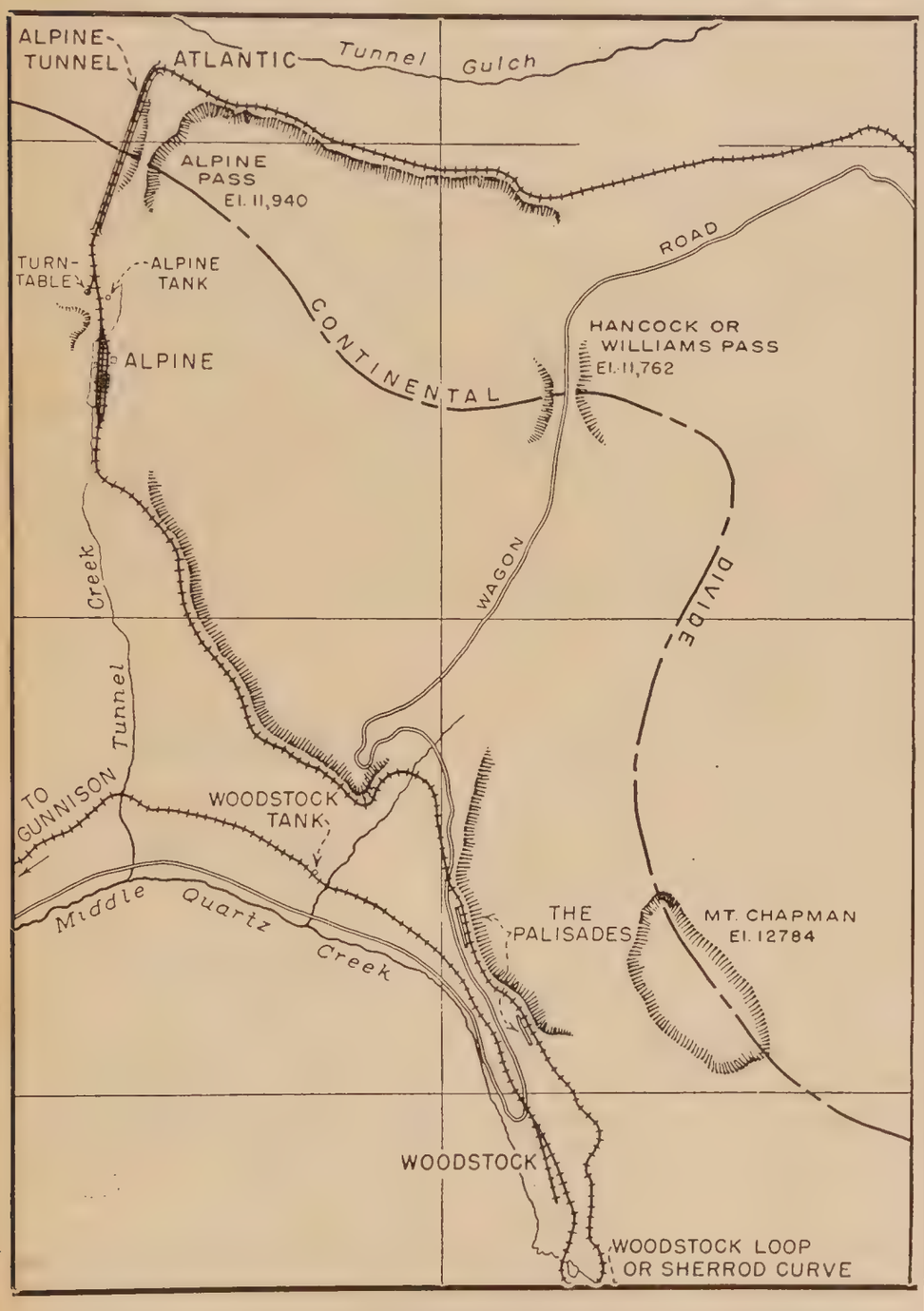
By mid-afternoon the outfit was crawling along the sheer face of the Palisades, a few miles below Alpine Pass. Here, some granite rubble littered the three-foot-gage track, but this too was cleared from the right-of-way in no time at all, and the little bogie trundled on toward her destination.

Shortly after three in the afternoon, the outfit reached the little station of Alpine Tunnel. The frame depot with its order-board in front was still solidly intact as were the hewn-granite engine-house and the small stone hotel on the other side of the track. The tunnel itself was a half-mile farther to the east. Since there was still plenty of time left before dark, the crew decided to run up to the entrance of

the long snow shed, which protected the west portal of Alpine Tunnel, to see how it had stood up under seven hard winters of neglect.

Elmer, Mike Flavin, and Oscar Cammann left the bogie and the work crew and went into the snow shed to investigate. It seemed to be as sturdy as the day it was built. When they reached the entrance of the tunnel itself, Oscar went into the darkness of the bore ahead while the two trainmen waited at the portal for him to return. The receding light from Oscar's feeble lantern grew dimmer and dimmer and finally vanished altogether, leaving the two men in utter darkness. The melancholy sound of water dripping from the ceiling and from those redwood-timbered walls was eerie and forbidding.

Elmer began to get uneasy. Oscar's light had gone, and only Mike's steady breathing, coming, coming, in that deathly echoing silence told him his friend was still there.



M. C. Poor's "Denver, South Park & Pacific" (Rocky Mountain Railroad Club)

The tunnel pierced the Continental Divide. Dad's crew would approach from Gunnison, while a rotary would attempt to open her from the east.

OPPORTUNITIES FOR EVERYBODY

EDUCATIONAL OPPORTUNITIES M-MR5

HOTELS CALL FOR Trained Men. Record-breaking travel means nation-wide opportunities and a sound, substantial future for trained men in hotels, motels, clubs. Fascinating field; fine living; quick advancement. Qualify at home or through resident classes in Washington. Previous experience proved unnecessary. Placement Service Free. Write for Free Book. Course Approved for Veteran Training. 39th Year. Lewis Hotel Training School, Room AC-9112, Washington 7, D. C.

MAKE MONEY 90 Ways in Photography. Earn while you learn at home. Good pay, fascinating work await you in photography. Our famous, low-cost, learn-by-doing method and individual guidance train you quickly at home. Write today for free catalog. Also Co-Ed Resident training. 45th year. G.I. approved. New York Institute of Photography, Dept. 79, 10 W. 33 Street, New York 1.

PLASTICS HOME-CRAFT course for Men and Women. Tells and shows how to make hundreds of fast selling plastics products. All plastics and materials for 23 projects included in course. No special tools needed. Course pays for itself. Write for Free booklet. Interstate Training Service, Dept. D-73-C, Portland 13, Oregon.

AERONAUTICAL ENGINEERING IN 2 years. Aircraft and Engine Mechanic in 1 year. Train at Northrop Aeronautical Institute in Southern California. Intensive courses prepare you for top industry jobs. Approved for Veterans. Write for free catalog. Northrop Institute, 1169 Arbor Vitae, Inglewood 1, California.

COMPLETE HIGH SCHOOL at home in spare time with 58-year-old school; texts furnished; diploma; no classes; booklet free. Write American School, Dept. X364, Drexel at 58th, Chicago 37, Illinois.

LEARN TO WRITE for Profit—Pleasure—Popularity. Spare Time. Send for Free Brochure. American Institute of Professional Writing, Alameda, New Mexico.

PHYSICAL THERAPY PAYS Big. Learn at Home. Free Catalog. National Institute, Desk 5, 4868½ Sheridan, Chicago 40.

EMPLOYMENT SERVICES

FOREIGN JOBS. MANY firms now hiring. Construction contracts underway and soon starting. Europe, South Pacific, Alaska, Canada, Asia, Near East and Pan America. Locations, amounts, descriptions, customers and contractors with addresses. Plus future prospects and other important information. Authenticated copyrighted monthly publication. Free employment application form if you act now. Refund guaranteed if not completely satisfied. For immediate action mail total price of only one dollar to: DCS Foreign Job News, Bridgeport 1, Illinois.

YOU CAN'T LOSE. Top pay U. S. construction jobs coast to coast. Latest list tells who, what, where, when. No phonies. Send $1.00. Money-back guarantee. Dempster's Construction Scout News, Bridgeport 11, Illinois.

DETECTIVES

LEARN CIVIL AND Criminal Investigation at home. Earn steady good pay. Inst. Applied Science, 1920 Sunnyside, Dept. 142, Chicago 40, Ill.

INSTRUCTION

WORK FOR U. S. Gov't! Men-Women, 18-55. Start high as $80.00 week. Qualify Now! 23,000 jobs open. Experience often unnecessary. Get Free 36-page book showing jobs, salaries, requirements, sample tests. Write: Franklin Institute, Dept. Z-36, Rochester, N. Y.

UPHOLSTERY—BECOME PROFESSIONAL At Home. Big earnings. Free Book. Free Sample Lesson. Veteran Approved. Write Upholstery Trades School, Dept. DC-106-02, 721 Broadway, New York 3.

LEARN AUTO BODY Fender Repair at home, spare time. Big money trade. Includes welding, spray painting, metal work. Write for free facts. Autocrafts Training, Dept. XJA-1, 2523 Sheffield, Chicago 14, Illinois.

SALESMEN WANTED

SELL ADVERTISING BOOK matches. Big daily commission in advance—Union Label plus Glamour Girls, Scenics, Hillbillies; all standard styles and sizes. Big Free Master Catalog. Fast selling—steady repeat business. Superior Match Co., Dept. Z-355, 7528 So. Greenwood, Chicago 19.

ANYONE CAN SELL famous Hoover Uniforms for beauty shops, waitresses, nurses, doctors, others. All popular miracle fabrics—nylon, dacron, orlon. Exclusive styles, top quality. Big cash income now, real future. Equipment free. Hoover, Dept. L-113, New York 11, New York.

GET NEW SHIRT Outfit Free; make $90.00 weekly on 5 average orders a day. Famous quality Made-To-Measure dress and sport shirts at $3.95 up sell fast to all men. No experience needed. Full or part time. Write: Packard Shirt Co., Dept. 874, Terre Haute, Ind.

WILL YOU WEAR new suits and topcoats without one penny cost and agree to show them to friends? You can make up to $30.00 in a day even in spare time, without canvassing. W. Z. Gibson, 500 South Throop St., Dept. Y-459, Chicago 7, Illinois.

BIG MONEY-MAKING opportunity. Exclusive line work uniforms. Jackets, pants, shirts, coveralls. Advertising embroidered. Every business prospect. Outfit Free. Master Div., 366 Water, Ligonier, Ind.

GOLDMINE OF 600 money makers. Copy Free. Specialty Salesman Magazine, Desk 12, 307 N. Michigan, Chicago 1.

CLAIM INVESTIGATORS

INVESTIGATE ACCIDENTS—THOUSANDS of insurance companies, airlines, and steamship lines use Claim Investigators. Many earning Big Money. Learn this fascinating work—easily, quickly. We train you at home spare time. Free book—Now! Universal Schools, Dept. P-3, Box 8202, Dallas 5, Texas.

REAL ESTATE INSTRUCTION

TEXAS HOMESITE $5.00 Down! Full price $89.50 on easy terms. Big 5000 square foot homesite at Bandera, Texas. Heart of "Dude Ranch Country." Electricity, telephone. 1300 feet above sea level. Warm days and cool summer nights make vacation paradise. Hunting, fishing, golfing, swimming, horseback riding. Write for Free photographs and details. Bandera Pass Ranch, Dept. 200, Bandera, Texas.

BE A REAL Estate Broker. Study at home. Write for Free book today. GI Approved. Weaver School of Real Estate, 2020E Grand, Kansas City, Missouri.

LEATHERCRAFT

LEATHERCRAFT. EVERYTHING NEEDED by beginners, advanced hobbyists and professional leatherworkers. Largest stock of supplies in U. S. Moderate-priced tooling leathers, top quality calfskins, tools, supplies, kits. Send 10c for Big Catalog. J. C. Larson Co., 820 S. Tripp, Dept. 4390, Chicago 24.

OF INTEREST TO WOMEN

$200.00 OR MORE paid by Advertisers for Children's Pictures for Calendars, Magazines (all ages). Wonderful opportunity for Your Child. Rush one small picture for approval. Returned 30 days. Print child's, parent's name and address on back. Spotlite, 5880-P3M Hollywood Blvd., Hollywood, Calif.

MORE CLASSIFIED ON PAGE 49

"Dad ever tell you about that Indian curse," he said.

The darkness picked up the word and threw it echoing back at them: *Curse . . . Curse . . . Curse . . . Curse . . .*

"I heard tell of it," Mike said, almost in a whisper.

Nearly an hour later Oscar's lantern appeared dim and star-like in the darkness beyond them and began to grow larger and brighter and soon they could see him stumbling over the wet ties toward them.

"I found a little stuff blockin' the track near the center," he said, "but it won't take us long to clear it off first thing in the morning. Our biggest trouble is gonna be gettin' rid of the water that's dammed up at the east end by a snow slide. It's ten or twelve feet deep and runs back this way a couple hundred feet."

"Can't we bust out the snow dam?" Mike asked.

"Not near as easy as we can fix up a syphon," Oscar said.

Mike was silent a few moments, then he said, "Danged if I don't think that syphon idea's a good one. First thing tomorrow mornin' we'll move our outfit into the tunnel an' set the syphon to workin'."

THE ATMOSPHERE was sharp as a frozen needle when Elmer walked toward the bogie with Dad the next morning. One of the laborers had kept fire and steam in the little machine overnight, and her safety valves showed a squirrel tail of steam. There were five of them—Elmer, Dad, Mike Flavin, Mike Byrnes, and Oscar Cammann. The rest of the laborers remained at Alpine Tunnel Station. There was no point, Oscar said, in cluttering up the tunnel with a lot of useless men, and he was sure he could toss what rubble had fallen between the rails out of the way without any trouble. Besides, he claimed to know all about installing the syphon in the small lake backed up against the slide at the east end of the tunnel. Except that Oscar was there, it might have been a routine trip with the 51.

Elmer rode in the vestibuled cab. Mike Byrnes, the fireman, had lighted the oil headlight, and, when the bogie rolled into the pitch blackness of the tunnel it threw an orange blob of light ahead. The noise was thunderous, and Elmer clapped his hands over his ears. Before they had moved far all the men were coughing from the sulphurous fumes thrown against the ceiling by the diamond stack.

It took Oscar Cammann less than five minutes to toss the rubble to one side. But they were vital minutes, during which the firebox of the bogie swiftly consumed the life-giving oxygen from the stagnant air.

When they reached the apex of the tunnel, Dad Martinis shut his throttle off and turned sideways on his seat so that he faced the left side. He rested his right hand on the longe reverse lever, and his left on the air brake handle. They rumbled down the gradual grade, held to a slow crawl by the brakes.

When the headlight fell on the pool of clear water which they intended syphoning off, Dad halted the outfit. Mike Flavin came stumbling ahead to the cab, his oil lantern bobbing to his footsteps. Oscar Cammann jumped off and plunged ahead, dragging the syphon hose over the ties. Suddenly Elmer, who still stood in the cab, saw Oscar stumble, then fall flat between the rails. He watched for the laborer to get to his feet, but Oscar made no move of any kind.

Elmer raised his hand and wiped at his eyes. They seemed to be playing him tricks. The lanterns were burning strangely, low and blue, as if they were about to go out. His head felt funny, and something seemed to be wrong with his breathing. He heard a sound. It was Mike Byrnes. The fireman had plunged from the cab and fallen into a heap below.

"What's happened, Dad?" Elmer croaked, and turned his gaze toward the engineer. Dad Martinis was sitting upright, his left hand on the air valve, his right still on the reverse lever. The old fellow made no reply. The lanterns went out, but the darkness closed in upon them.

Elmer realized then that all of them were being suffocated. Desperately he threw himself from the cab, struck the slippery ties below, and dropped to his hands and knees above a trickle of water which flowed into the pool. He had heard somewhere that air was always sweeter close to running water.

On his hands and knees he began crawling toward the west entrance of the tunnel, almost 1800 feet away. Half conscious, his muscles screaming to relax, he drove himself forward by sheer youth combined with will power.

After what seemed like hours, Elmer finally staggered from the tunnel and trotted drunkenly to Alpine Tunnel Station, shouting hoarsely for the men to go help the others trapped in the bore.

But that day the curse that Dad Martinis claimed hung over Alpine Pass took its toll. Only Elmer England came out alive, saved by his youth which gave him that extra will and stamina to crawl through that deadly darkness back into life. The others paid the price for their age.

A few days later, Alpine Pass again opened to traffic, and Elmer England went back to work with a new crew on the bogie. Maybe he'd had enough of excitement and high adventure. In any case he stayed with the DL&G until 1910 when the line over Alpine Pass was abandoned forever, and the mysterious curse of Alpine Tunnel was finally laid to rest. ●

Books of the Rails

THE DILWORTH STORY: The Biography of Richard Dilworth, Pioneer Developer of the Diesel Locomotive, by Franklin M. Reck, McGraw-Hill Book Co., New York, illustrated, 105 pages, $3.

MORE THAN any other single person, Richard Dilworth, until recently the presiding genius of General Motors' fabulous Electro-Motive Division, was responsible for the diesel revolution. *The Dilworth Story* takes a quick look at the man and his work. The result is a middling good book.

As a biography, there's too much of the engineer, too little of the man. As a history of Dilworth's role in the development of the diesel, there is too little indication of what was going on elsewhere. For example, you'd never know from this book that Alco ever existed.

Dilworth's career recalls the Horatio Alger tradition. The son of an Oregon preacher, he had only a half day of formal schooling, didn't like it, and set out at age twelve to see the world—as a machinist. He hired out to General Electric in 1910, just in time to get in on GE's new gasoline-electric rail-car and, later, GE's first experimental diesels.

In 1926 he went to Electro-Motive as chief engineer. He developed a series of gasoline engines which culminated in the Union Pacific's *City of Salina* and the Burlington's *Pioneer Zephyr*. In rapid succession Dilworth designed the first commercially successful diesel passenger and freight locomotives.

His most important post-war development was EMD's best-selling General Purpose locomotive, an ugly, all-round unit, which even steam men kind of liked. With her cab in the middle, the GP suggested a steamer with the boiler in front. Dilworth designed her with the men who would run her in mind.

"When the hogger opened the throttle," he says, "I wanted him to feel it in the seat of his pants."

But perhaps more than anything else, Dilworth's fame lies in having led the diesel into the paths along which development would take place—insisting on the acceptance at GM of the multi-unit "building block" concept of motive power.

When you've made tests over and over again, he says, you arrive at a formula. You know it is not nearly true, but it will do to work with until you learn something better. Next thing it's in a textbook and everyone is accepting it as gospel.

GREAT RAILROAD STORIES OF THE WORLD, edited by Samuel Moskowitz, introduction by Freeman H. Hubbard, The McBride Co., New York, 331 pages, $3.95.

UNLESS you take the "great" in the title too seriously, this book is as diverting a collection of railroad fiction and fact stories as you're likely to come across anywhere. Besides the usual engine-service tales, you'll find yarns about trainmasters, yardmasters, signalmen, porters, and so on, plus Doug Welch's comedy about the model-railroad widow, "Mrs. Union Station."

The best pieces, it seems to us, are the justly renowned essay on the Virginia & Truckee by Lucius Beebe and Charles Clegg, Marquis James's low-keyed narrative of the Andrews raid, and T. E. Lawrence's account of blowing up a train in Turkey. Charles Dickens's "The Signal Man," a tale about a man tormented by responsibility for accidents which he can predict but not prevent, is filled with claptrap and supernatural goings-on, but the atmosphere is good and the hero's problem is genuinely moving.

Frank L. Packard's "The Man Who Confessed" is an excellent, but sentimentalized, rendition of an old railroad fiction formula. The characters are warm and hearty; the operations smell of soot and grease.

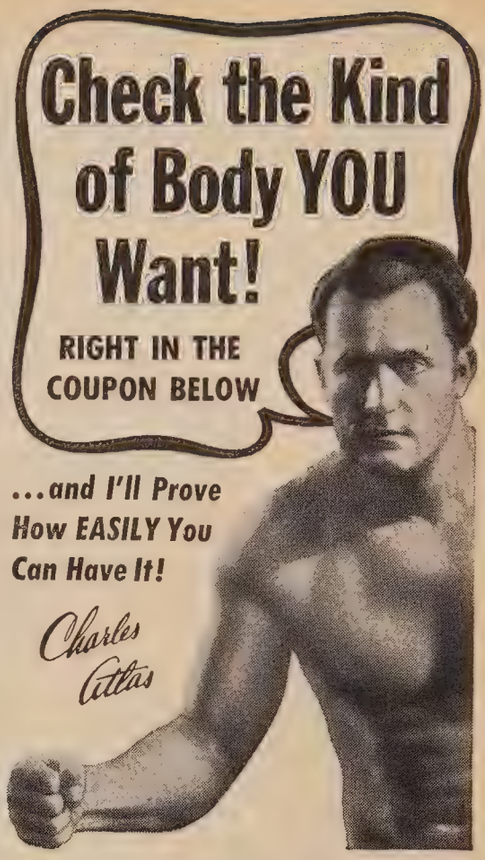
Jack McLarn's "Trackside Grave" and "Yardmaster," both of which originally appeared in *Railroad Magazine*, and former *Railroad Magazine* editor William E. Hayes's "Big Engine," were written by railroaders who know their business.

William Saroyan's moody and mystical "Train Going" fights it out with Thomas Wolfe's mawkish fable "The Far and the Near" for the distinction of being the worst item in this otherwise satisfying collection.

You may have reservations about the tawdry surprise-ending of A. W. Somerville's story of an engineer's love for his wife and his engine. Gerhart Hauptman's study of the guilt-ridden "Flagman Thiel," which apparently seemed impressive in a pre-Freudian era, is somewhat antique and clumsy today. Octavus Roy Cohen's Pullman-porter comic, "A Toot for a Toot," rounds out the consist.

A few old favorites like Harry Bedwell and Haywire Mac have been omitted, but no anthology can hope to include everybody. Samuel Moskowitz contributes a series of notes about the authors, not all of them accurate, while Freeman Hubbard's introduction sets the mood for these largely steam-powered stories.

IN THE WORKS are two new books: *The Railroad Police* by H. S. Dewhurst, of the AAR, to appear this spring, and one by Dr. George R. Taylor, of Amherst, and Irene Neu, tracing the physical growth and integration of U. S. railroads up to 1890, coming soon.



JUST tell me where you want it—and I'll add SOLID INCHES of powerful new muscle SO FAST your friends will grow bug-eyed with wonder! I'll PROVE you can get the kind of body you want in just 15 minutes a day—in your own home—or it won't cost you a penny!

You wouldn't believe it, but I myself used to be a 97-lb. weakling. Fellows called me "Skinny." Girls made fun of me. THEN I discovered my marvelous new muscle-building system—**"Dynamic Tension."** It turned me into such a specimen of MANHOOD that today I hold the title "THE WORLD'S MOST PERFECTLY DEVELOPED MAN."

"DYNAMIC TENSION"—that's my secret. When you look in the mirror and see a healthy husky fellow smiling back at you—then you'll realize how fast **"Dynamic Tension"** GETS RESULTS! That's because it's the natural method you can practice in your own room—JUST 15 MINUTES A DAY—while your chest and shoulder muscles begin to swell . . . those arms and legs of yours bulge . . . and your whole body starts to feel "alive," full of zip and go—INSIDE and OUT!

FREE Illustrated 32-Page Book. Just Mail the Coupon.

Send NOW for my famous book "Everlasting Health and Strength." 32 pages packed with photographs, valuable advice, answers many vital questions. This book is a real prize for any fellow. Yet I'll send you a copy absolutely FREE Just glancing through it may change your life! Rush coupon to me personally: **CHARLES ATLAS, Dept. 197Q, 115 E. 23rd St., N. Y. 10, N. Y.**

CHARLES ATLAS, DEPT. 197Q,
115 East 23rd St., New York 10, N. Y.

Dear Charles Atlas,
Here's the Kind of Body I Want:
(Check as many as you like)

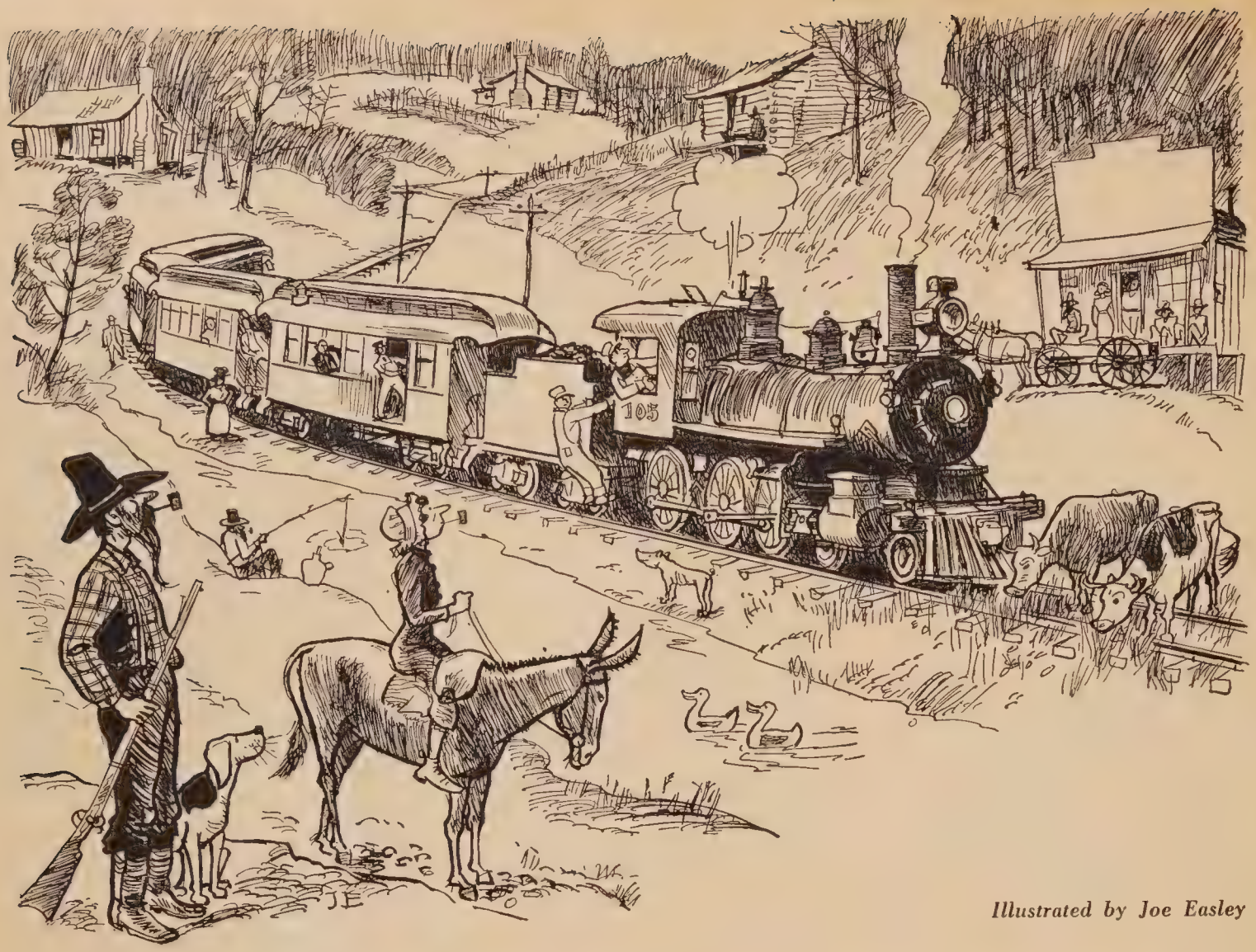
- ☐ More Weight—Solid—in The Right Places
- ☐ Broader Chest and Shoulders
- ☐ Powerful Arms and Grip
- ☐ Slimmer Waist and Hips
- ☐ Powerful Leg Muscles
- ☐ Better Sleep, More Energy

Send me absolutely FREE a copy of your famous book "Everlasting Health and Strength" —32 pages, crammed with photographs, answers to vital health questions, and valuable advice. I understand this book is mine to keep and sending for it does not obligate me in any way.

NAME.....AGE.....
(please print or write plainly)

ADDRESS.....

CITY.....STATE.....



Illustrated by Joe Easley

SLOW TRAIN THROUGH ARKANSAW

The Book Tom Jackson Wrote About It Rode into Big Money

by STUART COVINGTON

ACROSS the tawny water of the Columbia River drifted a staccato bark from the tall, flute-topped stack of a passenger engine as the day local of the Oregon Railroad & Navigation Company (now Union Pacific) hammered along the tracks toward Pendleton.

It was a mild summer morning in 1902. The smoking car held about thirty male passengers, mostly traveling salesmen from Portland, wearing black derbies and celluloid collars and fancy stickpins. Their shoes were highly polished. Glittering watch chains draped across their vests. The blue smoke from their fat cigars and slim cheroots enveloped the wooden coach's ornate Pintsch gas chandeliers in a thick and rather pungent haze.

One of the drummers was laughing gustily at the cartoons in *Puck*. Others were playing poker. Still others whiled away the miles by swapping tall tales. They discussed rather too intimately the woman with one head and two bodies who was currently being featured in the Barnes Circus. They told racy stories about the farmer's daughter. They relayed all kinds of jokes they had picked up on their travels.

The boomer brakeman who had punched their tickets listened intently. He made notes on the back of a timetable and joined in now and then with a quip of his own. A husky, square-jawed fellow he was, Thomas William Jackson by name, and his blue uniform with its shiny brass buttons set off his boyish figure as if it had been tailored to fit.

A drummer related: "One day I was on a train when a young man was walking up and down the aisle and cussing. There was a preacher in the car, and he said: 'Young man, do you know where you are going, sir? You are going straight to hell!' 'I don't give a damn,' the young fellow said. 'I've got a round-trip ticket.'"

Not long afterward this identical joke, with the "damn" changed to "darn," appeared in a paper-backed humorous book. The brakeman who chuckled over it that day in 1902 became an author. He called his first volume *On a Slow Train Through*

Arkansaw. The title should have been *On a Slow Train Through Oregon and Other States,* for Tom Jackson filled it with the funny stories he had picked up during his years of railroading in the Northwest. The *Slow Train* was destined to reach seven million copies, almost topping the list of all-time best sellers, and bring both fame and fortune to its author. It is still ringing cash registers on newsstands.

At first, though, only a thousand copies were printed. Tom knew that a lot of people would pay for laughs, but he underestimated their number by millions.

Tom was the only son of a Methodist preacher. Maybe that explains why his joke books are free of objectionable language.

"I'll print nothing," he said, "that can't be told in the parlor."

A Texas newspaper once called him "the people's humorist." He collected funny stories as some folks collect foreign stamps or engine pictures or railroad timetables. Not satisfied with the quips he heard on board the trains while he was braking, the preacher's son traversed every one of the forty-eight states in the Union seeking humor for his low-priced books.

Everywhere he went he listened—in railroad cars, beaneries, crew rooms, switch shanties, YMCAs, hotels, and cafes. Listened and remembered. His memory was excellent, but once in a while he would jot down items that he might otherwise have forgotten.

Tom's father, the Rev. Thomas M. Jackson, migrated from the green-forested hills of North Carolina with his Bible, his comely young wife, and his household goods to Morristown, Tennessee. Then came the attack upon Fort Sumter. The man of God sided with the new Confederacy, but many of his Morristown neighbors didn't; so in 1865 the Jacksons moved to a more hospitable section, near Manchester in the same state. There, on a farm, the future author of *Slow Train* was born, in 1865.

BEFORE Tom donned long breeches, his pious father was off to a new frontier. Pastor Jackson loaded his little family and belongings into a covered wagon and headed for Texas. The son landed his first railroad job as callboy for the Houston & Texas Central at Sherman. A lean, likable lad of sixteen, he quickly made friends among Sherman's railroaders and they, in turn, filled his ears with yarns of the high iron.

Upon reaching the age of twenty, Tom hired out as a brakeman on the same road. But a home guard's life held little appeal for the boy from Tennessee. He pulled the pin on the H&TC and journeyed to Springfield, Missouri. There the Frisco Railroad looked good and he signed on as brakeman.

One day, while Tom was laying over between runs, he met a shapely, blue-eyed wisp of a girl named Della Prater. Della was quiet, modest, and level-headed, in sharp contrast with various wild females that the young brakeman had met on his travels, and so he married her in 1887 in a white-washed Methodist church after a whirlwind courtship.

"Let's take a real honeymoon," the bridegroom suggested. "Let's go all the way out to the State of Washington."

Della danced with glee and clapped her hands. "Sure, Tom. We'll go to Washington. Maybe you can get a good railroad job there."

So they traveled to Washington, and once more Tom donned a trainman's uniform. This time he went braking on the Seattle, Lake Shore & Eastern (now Northern Pacific) out of Seattle. By now he was a confirmed boomer. In 1894 he drifted back to Texas, worked on the Katy, and lost two fingers in a link and pin coupling. But even the brush with death and a long siege in the Waco hospital failed to impair his sense of humor. He swapped jokes with Della who stayed close to his bedside, and with everyone else who visited him.

After he left the hospital, Tom landed a job on the St. Louis, Iron Mountain & Southern (now Missouri Pacific) braking freight between Texarkana and Little Rock. The turn of the century found him back on the West Coast, this time with the OR&N.

Tradition has it that while he was reading an earlier joke book Tom conceived the idea of putting out one of his own. At any rate, he spent much of his leisure time at home laboriously

MEN PAST 40

Afflicted With Getting Up Nights, Pains in Back, Hips, Legs, Nervousness, Tiredness.

If you are a victim of the above symptoms, the trouble may be due to Glandular Inflammation. A constitutional Disease for which it is futile for sufferers to try to treat themselves at home. Medicines that give temporary relief will not remove the cause of your trouble.

To men of middle age or past this type of inflammation occurs frequently. It is accompanied by loss of physical vigor, graying of hair, forgetfulness and often increase in weight. Neglect of such inflammation causes men to grow old before their time — premature senility and possibly incurable conditions.

Most men, if treatment is taken before malignancy has developed, can be successfully NON-SURGICALLY treated for Glandular Inflammation. If the condition is aggravated by lack of treatment, surgery may be the only chance.

NON-SURGICAL TREATMENTS

The NON-SURGICAL treatments afforded at the Excelsior Institute are the result of 20 years research by scientific Technologists and Competent Doctors.

The War brought many new techniques and drugs. These added to the research already accomplished has produced a new type of treatment that is proving of great benefit to man as he advances in years.

The Excelsior Institute is devoted exclusively to the treatment of diseases of men of advancing years. Men from all walks of life and from over 1,000 cities and towns have been successfully treated. They found soothing and comforting relief and a new zest in life.

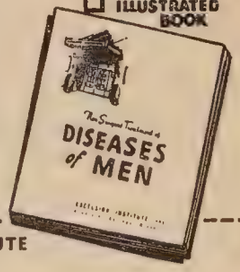
EXAMINATION AT LOW COST

On your arrival here, Our Doctors who are experienced specialists, make a complete examination. Your condition is frankly explained to you with the cost of treatment you need. You then decide if you will take the treatments needed. Treatments are so mild that hospitalization is not necessary—a considerable saving in expense.

RECTAL COLON
Are often associated with Glandular Inflammation. We can treat these for you at the same time.

Write Today for Our FREE ILLUSTRATED BOOK

The Excelsior Institute has published a New FREE Book that is fully illustrated and deals with diseases peculiar to men. It gives factual knowledge and could prove of utmost importance to your future life. Write today for a copy of this important Book.



EXCELSIOR INSTITUTE
Dept. 4077
Excelsior Springs, Mo.
Gentlemen. Kindly send at once your New FREE BOOK. I am _____ years old

NAME _____

ADDRESS _____

TOWN _____

STATE _____

piecing together, with Della's help, a manuscript he hoped would capture the public's fancy. An official of the Inland Printing Company at Spokane, which published his first book, recalled later that the original script of *On a Slow Train Through Arkansaw* was "the most conglomerated bunch of stuff we ever set up in book form."

W. A. McMahon, a veteran printer of Spokane, still retains a vivid recollection of Tom's visits to the Inland shop where he himself worked as a printer's devil in 1903.

"Mr. Jackson would come into the shop off his run," McMahon says, "with his brakeman's cap and gloves packed in a valise with the manuscript and proofs. He was a friendly, unassuming man. He felt that he could produce a practical joke-book that would amuse people and not offend anyone."

Although McMahon pulled the proofs on *Slow Train*, he failed to retain a copy.

"At that time," he explains, "none of us dreamed it would have any value as a keepsake."

Della's unfailing encouragement and rigid economy made the publication of her husband's book possible. From Tom's pay as brakeman she scraped together a fund to finance it. Their son Harry recalls:

"We never had a bank account until we came to Chicago. My mother always took care of the money."

THE 96-PAGE BOOKLET which climaxed Tom Jackson's efforts was as plain as an old shoe and by no means a literary masterpiece. But for a quarter the reader received a liberal serving of homespun humor. (Today the price is 35 cents.) On the first page of the original volume were these gems:

A lady said, "Conductor, can't this train make any better time than this?"
He said, "If you ain't satisfied with this train you can get off and walk."
She said she would, only her folks didn't expect her till the train got there.

A lady handed the conductor two tickets, one whole ticket and a half ticket.
He said, "Who is the half ticket for?"
She said, "My boy."
The conductor said, "He's not a boy; he's a man. Under twelve, half fare; over twelve, full fare."
She said, "He was under twelve when we started."

A few paragraphs below the reader found these samples of humor:

The news agent came through. He was an old man with long gray whiskers.
I said, "Old man, I thought they always had boys on the train to sell popcorn, chewing-gum, and candy."
He said he was a boy when they started.

Wedding-day portrait of Tom Jackson, boomer brakeman and author

There were two brakemen on the train. One was a new man making his first trip. The old brakeman said to the new one, "I will call the station in one end of the car and you will call the same in the other end."
When the train whistled for the station, the brakeman came in and called out the name in the front end of the car. The new brakeman in the hind end hollered, "The same in this end."

Many on oldtime traveler, bumping along on the morning accommodation, chuckled over this bit of corn:

I have an uncle. He is an engineer on a passenger train running in Minnesota. He is an awful smart man. He uses great judgment when anything happens and always does the right thing. Not long ago, while he was running 75 miles an hour, he looked out and saw right ahead of the engine a little girl sitting on the track. He knew he couldn't stop in time to save her, so he took a big rope he had on the engine, tied one end around the smokestack, threw the other end over a telegraph pole, jerked the train off the track, saved the little girl's life but killed fifty Swedes.

But perhaps the loudest guffaws were evoked by the story about the dead engineer:

I was standing on a street corner. There was a funeral procession going by. It was an awful long procession; there must have been at least 50 cars in the line. There was a couple of railroad men standing alongside me. One was a brakeman, the other an engineer.
The brakeman said to the engineer, "Who is dead? It must be some prominent person?"
The engineer said, "No, it is just a railroad man."
He said, "It must be an official then."
The engineer said, "No, it is just one of our engineers."
The brakeman said, "Well, if he ever looks back and sees all that string behind him, he will double into the cemetery."

AT FIRST *Slow Train* proved discouragingly slow in getting up steam. The news butchers, station restaurants, and news-stands to whom Tom wholesaled his brain-child had little luck in selling them. A mountain of books, wrapped in bundles of fifty each towered in the apartment of Tom and Della. One day the brakeman eyed the hundreds of copies and remarked glumly:

"Della, if by some miracle we can ever get rid of all those books, I'll never invest a dime in another printing job."

Beneath his jolly exterior, Tom Jackson was a shrewd business man. He laid off from the road, took a bundle of his books, and set out to sell them himself. Soon he was back for more.

The mountain dwindled rapidly, and Tom, forgetting his momentary weakness, ordered a new batch. Pretty soon the Jackson books were making a hit with the news butchers' customers. Copies of them were to become familiar sights in passenger cars for nearly half a century as news agents wove their way up and down the aisles of lurching coaches.

Before his leave of absence expired, Tom quit railroading.

"There's only two books that can beat mine," the author wisecracked, "the Bible and Rockefeller's pocketbook." He set up headquarters in Chicago at a location still maintained by the company. The next year he published a sequel to *Slow Train,* which he called, *Through Missouri on a Mule.* As the years went by, ten more of his books appeared. Altogether the Jackson books have sold above thirteen million copies. The author's son, Harry G. Jackson, reports that orders for them are still pouring in.

Tom Jackson made his last run June 6, 1934. He is sleeping out eternity on a sunny slope of Chicago's Mount Hope Cemetery beside his beloved Della. Skirting one edge of the cemetery are the Baltimore & Ohio tracks over which run modern diesels that could hardly remind the author, or anyone else, of the *Slow Train Through Arkansaw.*

STEAM TURBINE MAKES GOOD *(Continued from page 28)*

the largest horsepower available at the drawbar up to about 12 miles per hour; the Class Y6b has the highest drawbar horsepower from 12 to 31 miles per hour; and the Class A has considerable advantage over the other two locomotives at speeds above 31.

The unloading of the steam-turbine-electric at speeds above about 41.5 miles per hour is more apparent in its drawbar-horsepower curve. This is a condition that will be corrected on future locomotives.

Westbound tests on the Radford showed that, in day to day operation, the steam-turbine-electric locomotive could handle 3600 tons of empty coal hoppers from Roanoke to Bluefield. During the tests the new locomotive handled a maximum of 161 empty coal hoppers with a total train tonnage of 4052 tons westbound over this division. Tonnage rating for the Class Y6b, westbound on this division, is 3000 tons. The dynamic brake proved to be more than capable of holding the trains on the one percent descending grade between Christiansburg and Walton without using the air brake.

During the eastbound tests on the Radford Division the steam turbine locomotive handled a maximum of 144 loaded coal hoppers with a total train weight of 13,073 tons. An eastbound tonnage rating of 11,500 tons has been established for the new locomotive. The present eastbound rating for the Class Y6b is 10,300 tons. Both of these ratings include the use of a Class Y6 pusher over the 8-mile one percent compensated grade on the run from Walton to Christiansburg.

The dynamic brake on the turbine locomotive proved to be of great benefit in handling heavy trains between Bluefield and Glen Lyn and between Christiansburg and Elliston.

In the westbound tests on the 100-mile Pocahontas Division the steam-turbine-electric locomotive showed only a slight operating advantage over the railroad's Class Y6b.

Eastbound tests on the Pocahontas Division showed that the turbine could handle, in regular service, 8600 tons of loaded coal hoppers from Williamson to Farm, W. Va., and 4300 tons from Farm into Bluefield.

When handling the same tonnage as the Class Y6b on the mountainous Radford and Pocahontas divisions, the turbine locomotive made 4 to 13 percent less speed, but showed a fuel saving of 20 to 30 percent. In these two mountainous districts the steam-turbine-electric was able to handle between 18 and 27 percent more tonnage, varying with the districts. With increased tonnage, the speed was 13 percent less, and the fuel saving, based on cost per ton-mile, was 19 to 37 percent. This fuel saving varied with the proportion of the district allowing full capacity operation; the longer the turbine locomotive operated at full load, the larger the fuel saving.

On the Scioto Division, 112 miles, the steam-turbine-electric locomotive was tested and compared with the Class A. Both locomotives handled relatively the same tonnage on this district, the railroad's 175-car limit.

Immediate Comfort And Relief for You with *Patented*

RUPTURE-EASER

T. M. Reg. U. S. Pat. Off. (A Piper Brace Truss)

For MEN, WOMEN and CHILDREN

Right or Left Side **$3.95**

Double $4.95

A strong, form fitting washable support designed to give you relief and comfort. Adjustable back-lacing and adjustable leg strap. Snaps up in front. Soft flat groin pad—**no steel or leather bands.** Unexcelled for comfort, **invisible under light clothing.** Washable. Also used as after operation support.

- **THE MOST EFFECTIVE HERNIA SUPPORT.** Thousands of people who have tried old-fashioned, expensive devices turn to Rupture-Easer for new comfort.
- **RUPTURE-EASER IS SANITARY.** Can be washed without harm to fabric—you never offend when you wear Rupture-Easer.
- **NO FITTING REQUIRED.** Just measure around the lowest part of the abdomen and specify right or left side or double.

Over 1,000,000 Grateful Users

Read What Others Say:

R. C. of Corvallis, Oregon, Air Mails: *"Send me another Rupture-Easer so I will have one to change off with. It is enabling me to work at top speed at my press machine 8 hrs. a day."*

M. S. of Anderson, Ind., thanks us and says: *"It is one of the finest things I have ever worn and has made my life worth living. It has given me untold ease and comfort."*

L. C. H., Blackburn, Mo., writes: *"The Rupture-Easer I bought from you has done so much good I couldn't forget you this Christmas season."*

THERE'S NO SUBSTITUTE FOR PROVEN PERFORMANCE!

RUPTURE-EASER

10 DAY TRIAL OFFER

Money-back guarantee if you don't get blessed relief. **ORDER TODAY!**

PIPER BRACE CO., DEPT. AD-35

811 Wyandotte, Kansas City 5, Mo.

(Note: Be Sure to give Size and Side when ordering.)

USE THIS HANDY ORDER FORM

Piper Brace Company, Dept. AD-35

811 Wyandotte, Kansas City 5, Mo.

Please send my RUPTURE-EASER by return mail.

Right Side ☐ $3.95 Measure around lowest part

Left Side ☐ $3.95 of my abdomen is

Double ☐ $4.95 ..... INCHES.

We Prepay Postage Except on C.O.D.'s

Enclosed is: ☐ Money Order ☐ Check for $ .....

☐ Send COD **Be sure to give size and side**

Name .....

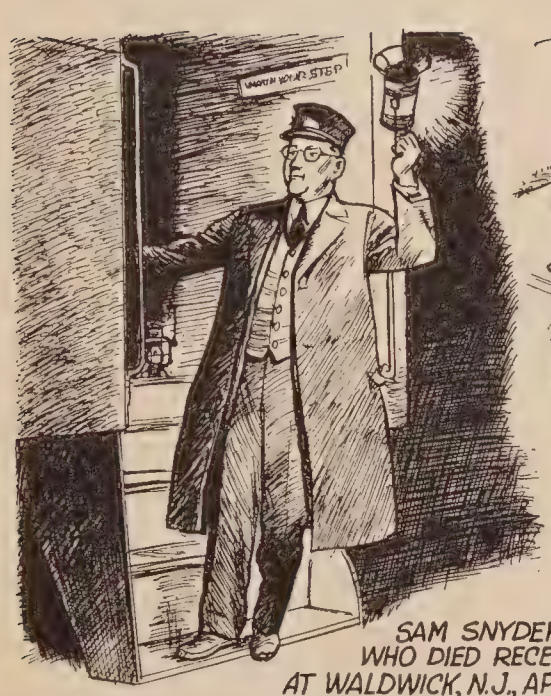
Address .....

City and State .....

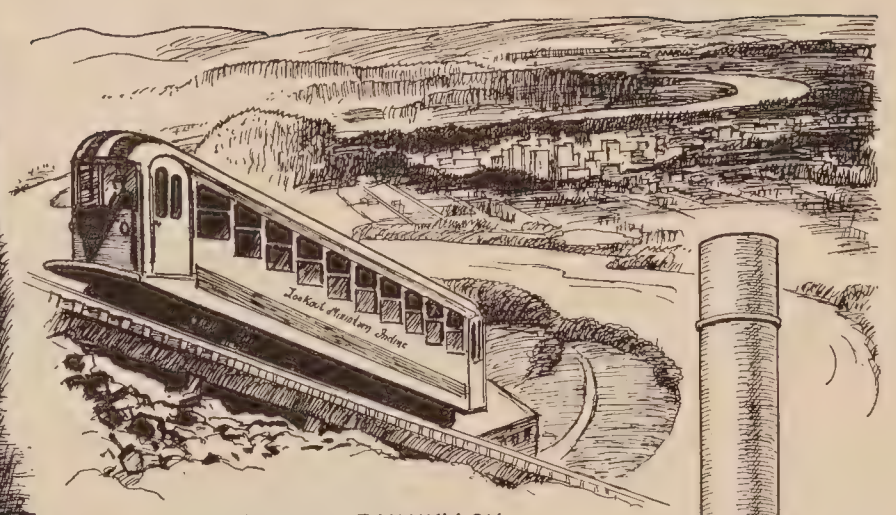
RUSH THIS COUPON NOW!

Along the Iron Pike

by Joe Easley

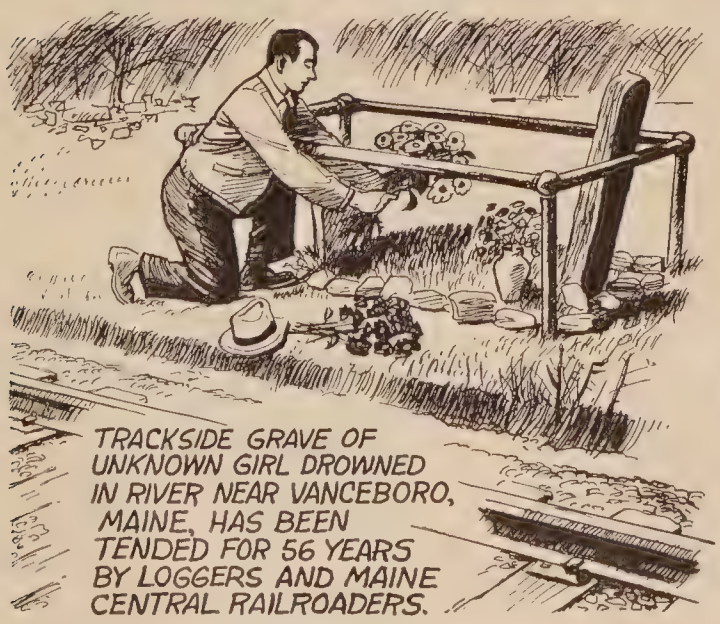


SAM SNYDER, 94, WHO DIED RECENTLY AT WALDWICK, N.J., APPEARED IN WORLD'S FIRST STORY-TELLING MOVIE, "THE GREAT TRAIN ROBBERY." HE SPENT 70 YEARS IN ERIE TRAIN SERVICE.
(from The Conductor & Brakeman Magazine)

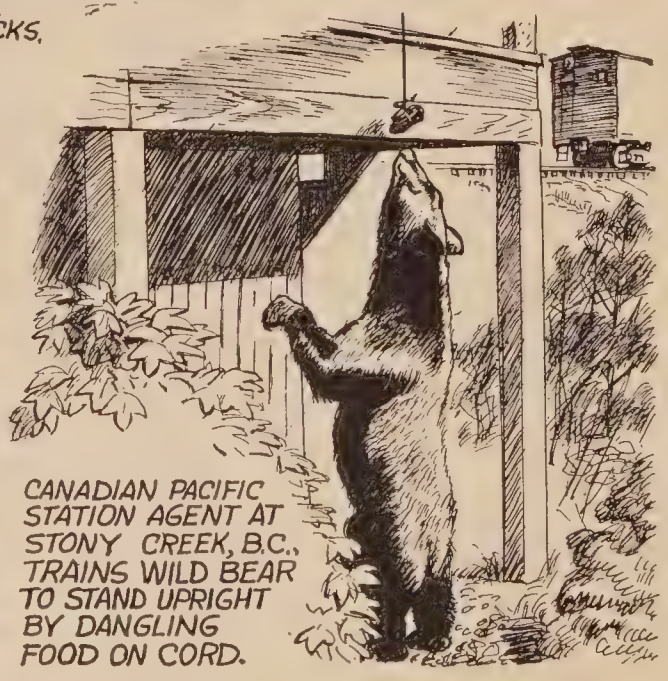


INCLINED RAILWAY ON LOOKOUT MOUNTAIN GIVES SUPERB VIEW OF CHATTANOOGA, TENN., AND CIVIL WAR BATTLEFIELD
(from T. J. Roddy)

TWO LOCOMOTIVES TEMPORARILY SUPPLY STEAM HEAT AT OCEANA NAVAL AIR STATION NEAR NORFOLK, VA., WITH A DeBOTHEZAT DRAFT FAN ON ONE OF THEIR STACKS.



TRACKSIDE GRAVE OF UNKNOWN GIRL DROWNED IN RIVER NEAR VANCEBORO, MAINE, HAS BEEN TENDED FOR 56 YEARS BY LOGGERS AND MAINE CENTRAL RAILROADERS.



CANADIAN PACIFIC STATION AGENT AT STONY CREEK, B.C., TRAINS WILD BEAR TO STAND UPRIGHT BY DANGLING FOOD ON CORD.

Westbound, from Williamson to Portsmouth, the steam turbine handled relatively the same tonnage as the Class A, but at a lower speed. The average speed of the turbine locomotive was 13.3 percent lower than the average of the Class A. In gross ton-miles per hour based on running time, the turbine test runs averaged 11.1 percent less than the runs with the Class A, but fuel cost per thousand gross ton-miles for the steam-turbine-electric locomotive averaged 29.6 percent less than for the Class A.

Eastbound test runs from Portsmouth to Williamson showed that the steam-turbine locomotive could handle the railroad's maximum car limit of 175 empty coal hoppers, but again, at a lower speed than the Class A.

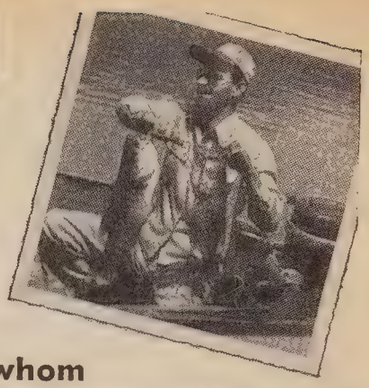
No major difficulties have been experienced with the steam-turbine locomotive at this time, despite some failures. These failures include: a stopped-up stoker trough, broken flexible steam connections to the cold water pump, failure of a traction motor blower-breaker, original main feed-pump governor of improper size, and difficulty with the main turbine controls. These minor troubles have been corrected.

A big question mark in the early design stages of the steam-turbine-electric locomotive was the boiler. However, the performance of the Bailey-meter-controlled Babcock & Wilcox boiler has surpassed all expectations. The boiler is very easy to fire, makes sufficient steam for maximum demands, is exceptionally responsive to load changes, and can be fired with a clear stack at all steam demands.

The coal-burning steam-turbine-electric locomotive is very promising. The ability of this 4500 HP locomotive to handle the same, or greater, tonnages as present locomotives with fuel savings up to 30 percent at only a small increase in time start to stop, makes it so attractive that it is imperative that further study be given to improvements in design that are apparent.

The locomotive has been placed in pool service, where its performance will be carefully watched while economic studies are being made. At this time, the future of this type of locomotive is bright. ●

Bass Fishermen will Say I'm Crazy . . . until they try my method!



But, after an honest trial, if you're at all like the few other men to whom I've told my secret, you'll guard it with your last breath.

Don't jump at conclusions. I'm not a manufacturer of any fancy new lure. I have no rods or lines to sell. I'm a professional man and make a good living in my profession. But my all-absorbing hobby is fishing. And, quite by accident. I've discovered how to go to waters that everyone else says are fished out and come in with a limit catch of the biggest bass that you ever saw. The savage old bass that got so big, because they were "wise" to every ordinary way of fishing.

This METHOD is NOT spinning, trolling, casting, fly fishing, trot line fishing, set line fishing, hand line fishing, live bait fishing, jugging, netting, trapping, seining, and does not even faintly resemble any of these standard methods of fishing. No live bait or prepared bait is used. You can carry all of the equipment you need in one hand.

The whole secret can be learned in twenty minutes —twenty minutes of fascinating reading. All the extra equipment you need, you can buy locally at a cost of less than a dollar. Yet with it, you can come in after an hour or two of the greatest excitement of your life, with a stringer full. Not one or two miserable 12 or 14 inch over-sized keepers — but five or six real beauties with real poundage behind them. The kind that don't need a word of explanation of the professional skill of the man who caught them. Absolutely legal, too—in every state.

This amazing method was developed by a little group of professional fishermen. Though they are public guides, they never divulge their secret to their patrons. They use it only when fishing for their own tables. No man on your waters has ever **seen it,** ever **heard of it,** or ever **used it.** And when you have given it the first trial, you will be as close mouthed as a man who has suddenly discovered a gold mine.

Because with this secret you can fish within a hundred feet of the best fishermen in the county and pull in ferocious big ones while they come home empty handed. No special skill is required. The secret is just as deadly in the hands of a novice as in the hands of an old timer. My secret will be disclosed only to a few men in each area—men who will give me their word of honor not to give the secret to anyone else.

Send me your name. Let me tell you how you can try out the secret method of bringing in big bass from your "fished out" waters. Let me tell you why I let you try out my unusual method without risking a penny of your money on instructions or lures. There is no charge for this information, now or at any other time. Just your name is all I need. But I guarantee that the information I send you will make you a complete skeptic—until once you try it! And then, your own catches will fill you with disbelief. Send your name, today. This will be fun.

ERIC E. FARE

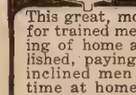
317 S. Milwaukee Ave., Libertyville 18, Illinois

E. E. FARE, 317 S. Milwaukee Ave.
Libertyville 18, Illinois

Dear Mr. Fare: Send me complete information without any charge and without the slightest obligation. Tell me how I can learn the secret method of catching big bass from "fished out" waters, even when the old timers are reporting, "No Luck."

Name.....
Address.....
City.....Zone....State.....

Success Requires Training! *LEARN*



AIR CONDITIONING and REFRIGERATION

This great, modern industry is alive with opportunities for trained men. Installation, maintenance and servicing of home and industrial equipment is a well-established, paying trade and business. Now mechanically inclined men can get practical instruction in spare time at home, plus quick shop practice at U. E. I. *(founded 1927)*

Important Facts FREE—*Write today*

Find out all about these interesting opportunities without obligation. Send a postcard or short note right now.

UTILITIES ENGINEERING INSTITUTE, Dept. AY-1
2525 SHEFFIELD AVENUE • CHICAGO 14, ILLINOIS

LOOSE DENTAL PLATES

RELINED AND TIGHTENED AT HOME $1.00

NEWLY IMPROVED DENDEX RELINER, a plastic, builds up (refits) loose upper and lower dentures. Really makes them fit as they should without using powder. Easily applied. No heating required. Brush it on and wear your plates while it sets. It adheres to the plates only and makes a comfortable, smooth and durable surface that can be washed and scrubbed. Each application lasts for months. Not a powder or wax. Contains no rubber or gum. Neutral pink color. Sold on MONEY-BACK GUARANTEE. Not sold in stores. Proved by 15 years of Consumer Use. **Send $1 plus 10¢ handling charge (stamps or coin).** Charges extra on C.O.D. orders.

DENDEX COMPANY, Dept. A-2
2024 West 6th Street • Los Angeles 5, Calif.

MEAT CUTTING Offers YOU SUCCESS And SECURITY

In The Best Established Business In The World — PEOPLE MUST EAT!

TRAIN QUICKLY in 8 short weeks for a bright future with security in the vital meat business. Trained meat men needed. Big pay full-time jobs, year-round income, no layoffs—HAVE A PROFITABLE MARKET OF YOUR OWN!

LEARN BY DOING AT NATIONAL

Get your training under actual meat market conditions in our big modern cutting and processing rooms and retail department.

PAY AFTER GRADUATION

Come to National for complete 8 weeks course and pay your tuition in easy installments after you graduate. Diploma awarded. Free employment help. Thousands of successful graduates OUR 31st YEAR!

FREE CATALOG—MAIL COUPON

Send now for big new illustrated National School catalog. See students in training. Read what graduates are doing and earning. See meat you cut and equipment you work with. No obligation. Send coupon in envelope or paste on postal card NOW! G.I. Approved.

NATIONAL SCHOOL OF MEAT CUTTING, INC.
Dept. AD-9 Toledo 4, Ohio

National School of Meat Cutting, Inc.
Dept. AD-9, Toledo 4, Ohio

Send me your FREE School catalog on National Training at Toledo in Meat Cutting, Meat Merchandising and Self Service Meats No obligation No salesman will call

Name ..... Age.....
Address .....
City ..... State.....
Approved for training Korean Veterans

Fred Bennett

Built at Wilmington, Del., in 1899 by Jackson & Sharp for service in Lynchburg, Va., BERA No. 34 later ran on New Jersey's Five Mile Beach Line.

MEMORY LANE (Continued from page 31)

cars you find an additional complication of electro-magnetic or electro-pneumatic switch groups for speed control and reversing. All of these need adjustment and, often parts replacement, beneath the deck.

The first step in maintaining such accessories is to clean them, which usually means transferring most of the dirt to your person. I am aware of the awkward positions you must squirm into and out of, and the stretch and strain you exert in cramped positions where mud-laden, greasy parts crowd your entire anatomy.

Hard, murderous iron bludgeons lurk there, waiting to spring from dark corners and crack your head, whack an elbow, or gouge a knee. Instructing a novice in this fine art seems almost a waste of breath. You must actually get in there and suffer a few bruises before you become sufficiently wary to avoid the booby traps. And if you merely brush against the overalls of a man who has just emerged from the ordeal beneath a car, you'll have to send your own suit to the cleaners.

It all comes under the head of riding down Memory Lane. You pay for your ride, brother.

HAVING RE-TIED and rebal-lasted a stretch of track, we spike it down, line it up, and pause briefly to rest on our laurels. Then we go back to the job of improving the line. Little by little, we put our railway in good shape.

To reduce our overhead line maintenance, we substituted a single-pole bracket setup for the original two-pole span wires. To cut our track maintenance work—and to raise some much-needed funds to help pay off our mortgage—we eliminated the second track. We now have a single-track line with sidings.

Never will we arrive at the blessed time when we can sit back and say: "Now the job is finished. Let's enjoy *running* the railway."

The elements continue to attack our line, sometimes slowly, subtly, with rust and rot, sometimes with sudden violence. Hurricane Carol dealt us a swift blow, toppling poles and washing out our fill on the salt meadows between Beacon Hill and Short Beach. At one spot our rails were left suspended in mid-air without benefit of ties, ballast, or fill beneath. That called for major repairs.

Two weeks later Hurricane Edna carried away the entire deck of our eastbound trestle over Farm River, leaving the pile-bents standing stark and naked.

On each occasion we had to lug all our starting batteries to high ground for safety—three tons of them! If you think it's easy toting around three tons of equipment by hand, try it some time.

But we don't give up. If we did, we'd never reach the promised land of Memory Lane. We get knocked down, and come up fighting. I doubt if the visiting public who enjoy pleasant rides over our line appreciate the Herculean tasks that made the rides possible. The car in which they travel performs well and looks beautiful. We often wonder what they would say if they had seen that car before we worked it over.

When we rescued old 9730 from Brooklyn, we expanded our experience in car-saving. The vehicle is a rare species, and we aim to keep it for posterity. Although it had become degraded to the status of a salt car, we undertook the task of restoring it to its condition of 1899, when LaClede turned it out for passenger service on the Nassau Electric Railroad on Long Island. We hoisted the car onto a low-bed truck by means of a huge overhead crane at the Coney Island shops. One member rode the car to Memory Lane, better known as Short Beach, while others formed a motorcade escort. A special course had been charted to avoid smashing our precious load into highway bridges. We got police permission to invade certain parkways on which trucks are normally forbidden.

As the cavalcade approached the Whitestone suspension bridge it eased down to a cautious pace. The alert custodian of the city dump saw us slowing up and the sight of this forlorn derelict car stirred his ire.

"You can't bring that thing in here!" he yelled, gesturing wildly.

He seemed relieved when we rolled past his domain, apparently to seek a more hospitable dump on the opposite shore of Long Island Sound.

A CAR that is donated to us outright may cost us $1,000 in transportation fees before its flanged wheels touch our steel rails. Then we may have to spend that much or more for materials and parts, with our labor thrown in gratis. Whenever a choice antique becomes available at some remote location, we connoisseurs must be practical and consider costs before we leap to its rescue. Much as we love to preserve cars from the vanishing Golden Era, we exercise moderation.

Whenever we are forced to pass up some rare item of rolling stock that we'd be pleased to add to our

growing collection, I console my associates by suggesting: "Suppose the Pacific Electric offered us *all* their cars free, if we would just come and get them, what could we do about it?"

Right now we have a total of 33 cars, enough to keep us busy rebuilding for the next five years. Meanwhile, if we don't get them under cover, the weather may make it a ten-year job, or worse. So we are doing what we can to erect carbarns to keep from going backward in our rehabilitation program. We never know when Hurricane Lizzie or whatever her name will be may suddenly descend upon Memory Lane and add to our work.

Our Book of Rules is patterned after the well-proven regulations which are standard for the big interurbans. Safety comes first. The dispatcher is always in command of car movements. No wheel turns without specific train orders, since we have not yet adopted an official operating timetable.

Before any personnel can qualify for operating equipment out on the line, they must take a course of instruction under an experienced supervisor and must then pass the operating test and a written examination on the Book of Rules.

Posted on our bulletin board are the latest instructions and precautions on conditions along the line and the names of crews assigned to various duties. Our superintendent in charge of safety, operations, and instructions has the responsibility for training BERA members who want to run cars. He also has the power to suspend from operating privileges anyone who violates rules.

Recently the New York *Sunday News Magazine* carried a double-page spread of color-photos showing our activities. The day it came out, we were deluged with a mob of visitors from far and wide. They came in droves, overflowing our parking facilities and choking up the narrow passageway that leads from our property all the way back to its junction with U.S. Route 1 near East Haven.

These motorists honked their horns. Indignantly they demanded that something be done about their predicament. We made a quick deal with an

DO WE HAVE TO DIE?

Forty-three years ago in forbidden Tibet, behind the highest mountains in the world, a young journalist named Edwin J. Dingle found the answer to this question. A great mystic opened his eyes. A great change came over him. He realized the strange power that knowledge gives.

That Power, he says, can transform the life of anyone. Questions, whatever they are, can be answered. The problems of health, death, poverty and wrong can be solved.

In his own case, he was brought back to splendid health. He acquired wealth, too, as well as world-wide professional recognition. Forty-three years ago, he was sick as a man could be and live. Once his coffin was bought. Years of almost continuous tropical fevers, broken bones, near blindness, privation and danger had made a human wreck of him, physically and mentally.

He was about to be sent back home to die, when a strange message came—"They are waiting for you in Tibet." He wants to tell the whole world what he learned there, under the guidance of the greatest mystic he ever encountered during his lifetime of travel throughout the world. He wants everyone to experience the greater health and the Power, which there came to him.

Within ten years, he was able to retire to this country with a fortune. He had been honored by fellowships in the world's leading geographical societies, for his work as a geographer. And today, 43 years later, he is still so athletic, capable of so much work, so young in appearance, it is hard to believe he has lived so long.

As a first step in their progress toward the Power that Knowledge gives, Mr. Dingle wants to send to readers of this paper a 9,000-word treatise. He says the time is here for it to be released to the Western World, and offers to send it, free of cost or obligation to sincere readers of this notice. In addition he will give to each of them a 64-page book showing the astonishing events the world may soon expect, according to great prophecies.

For your free copy of both works, simply send a postcard or letter to The Institute of Mentalphysics, 213 South Hobart Blvd., Dept. K864, Los Angeles 4, Calif.

WE PAY $16 for only 59 Lincoln Pennies

Send $1 for a Lincoln cent album (to hold your pennies). Fill the spaces with dates shown in album, return COMPLETE album and receive $16 by return air mail PLUS $1 back for album (total $17). Save other sets worth hundreds of dollars! All information sent with 1st album. Send $1 to: BYBYMAIL, P. O. Box 488 Dept. A HEMPSTEAD, L. I., N. Y.

MEN! REMEMBER THESE?

The Original OLD TYME Action COMIC BOOKLETS

● (For Men Only)

These exclusive titles are the "Real McCoy"!
TERRY & THE DRAGGIN' LADY • SMILIN ZACK
WINNIE TWINKLE • ANDY GRUMP & LYNN
HAROLD KEEN & THRILLUMS • MAE VEST

24 Different Available (vest pocket size)—10 for $1.00
SPECIAL! 24 different titles—all for $2.00. No C.O.D.

McCOY PRINT SHOP Dept. AP-1
for the "Real McCoy"
913 N. RUSH ST. CHICAGO 11, ILL.

FREE! If you order now! Our new list of "Real McCoy" items for men (adults only).

mechanical hypnotist

New "Pocket Size" invention, enables YOU to cause trance to self or others. Complete with instructions and Hypnotic secrets.

Send only $2.00 to . . .

Click Products Dept. RG • G.P.O. Box 1312 • New York 1, N. Y.

CAN'T SLEEP?

Noisy Neighbors? Barking Dog? Traffic? Airplanes? Kids? Radio?

NERVOUS SLEEPERS, Factory workers, day-sleepers here is THE BEST sound deadener on the market. Used by top movie stars. A simple little gadget you slip in your ear. Medically approved. Soft rubber. You won't even know they're there. For a good night's snooze send for your pair of ear stoppers. ONLY $1.25 Post Paid. Sorry no C.O.D. Money-back Guarantee.

WESTERN WORLD PRODUCTS, Dept. 89
2611 Tilden Ave., Los Angeles 64, Calif.

MAKE MONEY giving away FREE HOSIERY!

Men and women wanted to introduce amazing nylon stockings (guaranteed against runs and snags) and men's, children's hosiery (guaranteed one full year) by giving away free trial pairs regardless whether or not final purchase is made! Earn up to $3 an hour spare time. Mail postcard today for FREE samples men's and women's hosiery with complete money-making outfits. Nothing to pay now or later. Absolutely no obligation.

KENDEX CORP., BABYLON 267, N. Y.

DON'T PULL HAIR FROM NOSE

May Cause Fatal Infection

Use the Hollis KLIPETTE Rotating Scissors

You can cause serious infection by pulling hair from nose. Ordinary scissors are also dangerous and impracticable. No better way to remove hair from nose and ears than with KLIPETTE. Smooth, gentle, safe, efficient. Rounded points can't cut or prick skin.

So Simple! Just turn end. Surplus hair comes out easily, gently.

$1 made from fine surgical steel chromium plated.

Guaranteed to Satisfy or Money Back

HOLLIS CO. • 1133 Broadway, New York 10, N. Y. Dept. A-24

Enclosed is $1.00 for KLIPETTE. If I am not entirely satisfied, I may return it within 10 days for refund.

adjacent farmer to use his cornfield as a temporary parking arena for our visitors.

Soon we had every available trolley car that was in working order rolling up and down Memory Lane to handle the crowds. The local police from Branford arrived to help restore order. The chief himself came snorting up on his motorcycle to inquire what was going on and stayed to supervise the traffic.

"Don't ever pull a stunt like that again!" certain BERA colleagues told me. They seemed to resent the fact that some 4,000,000 new people had learned of our setup at Short Beach.

Fred Bennett

Union Street RPO once served Providence, R. I., and New Bedford, Mass.

Well, you can't please everybody. In an outfit where all the labor is on a volunteer basis and each member has a voice in affairs, the manager has his hands full. Tact and diplomacy must be employed as a substitute for authority. To keep a discussion from developing into a brawl is quite an undertaking.

If you think you'd like to run a railway, come on over, but you'd better bring your overalls and a can of sand soap. You'll never see anyone working so hard at having a good time as the greasy trolley connoisseurs of the Branford Electric Railway Association.

It's just our way of taking a ride down Memory Lane. ●

TRANSIT TOPICS

(Continued from page 46)

service than railway cars, the Board said that "replacement would add to smog and traffic congestion problems, require heavier pavement on some streets, and would be of doubtful benefit to patrons."

The Board's action is certainly long overdue. Experience has proved far too often that in practice buses do not provide better, faster, or more comfortable service than trolleys, and if you have any doubts, just ask any commuter who rides buses on a former electric railway route. The chances are you'll have trouble finding one. He probably already drives his automobile to and from work. Conversion of transit lines to buses generally is the last act before the lines are abandoned.

"IT WAS A REAL THRILL," writes William M. Cadmus, 235 S. Austin Highway, San Antonio 9, Texas, "to see the picture of Denver's old Cherrelyn horsecar in the January issue (page 75). When I was working on the Union Pacific there in 1907, I made a trip on the contraption. On the way back, the horse climbed aboard, and we started down. The animal rode on the rear platform, as the picture shows, and kept peering around the end of the car to see where he was going. It was just uncanny."

ELECTRIC RAILWAY OPERATION in the Dakotas has come to an end. The shortest electric line with the longest name, North Dakota's Valley City Street & Interurban Railway Co., which began operations in June, 1905, over 1.4 miles of track between the Soo depot at North Valley City and the Northern Pacific Yards in Valley City, has finally been sold to the Soo Line.

Despite its size, the line operated passenger service for many years, using a heavy interurban car with a baggage compartment, a piece of equipment that would have made many a long interurban line proud. When passenger service was abandoned during the depression, the big car operated in freight service until 1952 when a Twin Cities Lines work car took over. On September 24, 1953, the Soo put a diesel into operation, subsequently relaid the whole line with 80-pound rail, and rebuilt the 208-foot trestle over the Cheyenne River.

THE PRINCETON BRANCH TRAIN of the Pennsy, which makes twenty-five trips each day on the 2.7 miles of track between the Princeton Junction main line station and the college town of Princeton, N. J., now sports a new illuminated tail sign, writes H. L. Hampton, 69 W. Hazelwood Ave., Rahway, N. J., a PRR passenger conductor with thirty-eight years of service. The sign has the shape of a keystone and bears the seal and colors of Princeton University, whose students are its most frequent patrons.

Nicknamed the "PJ&B" (Princeton Junction and Back), the train usually consists of two PRR multiple-unit passenger cars. No other trains ever use its track except when specials bring football crowds into Princeton for the game. Then the PJ&B operates on a siding, nicknamed the "Tiger Track," which extends the length of its run.

Conductor Hampton's earliest recollections go back to the days when a D-16 engine hauled the passenger cars on the line. The engine had to scoot around the train at each turning point, and, because no turntable was available, ran backwards on southbound trips.

KANSAS CITY PUBLIC SERVICE COMPANY, which, like many other transit lines, is suffering from falling passenger revenues, has issued an interesting flyer detailing the six most serious problems facing transit companies.

Competition from private automobiles has cut passenger traffic in half, and, even worse, automobile traffic congestion downtown has made schedules harder to maintain and increased costs of operation. The five-day week has reduced Saturday from one of the best revenue days almost to the level of Sunday, leaving only five morning and late afternoon rush hours when traffic is heavy. The trend toward decentralization is continuing, and, with population and passengers dispersed, costs have risen again.

Radio and television are keeping people at home more than ever before, cutting down profitable evening traffic to downtown movies and other places of entertainment. Then too, wages have risen 75 percent since 1946, while during the same period revenue passengers declined 50.9 percent. Taxes, like Kansas City's gross receipts tax, imposed without regard to a company's financial condition, make it difficult to keep out of the red.

Suppose you operated this transit system. How would you go about trying to make it profitable?

CAR 581 of the Los Angeles Transit Lines made a long sea voyage to the Seashore Electric Railway museum in Kennebunkport, Me., writes E. Fabian, radio officer of the *S. S. President Tyler*, who spotted the car aboard ship on the forward deck with a large sign in one window reading, "Going to Maine to Seashore Railroad, Kennebunkport, Maine."

Mr. Fabian reports that at Portland, Me., the end of the ship's voyage, the car will undoubtedly be loaded on the Seashore's big trailer truck and taken to the museum grounds. Donated by LATL, the car is one of the last standard Huntington types.

Seashore Electric had thousands of visitors to see and ride the cars last summer. Next summer should be even better. Recently Seashore concluded negotiations with the Metropolitan Transit Authority of Boston, Mass., for seven historic old cars that MTA no longer wanted to preserve.

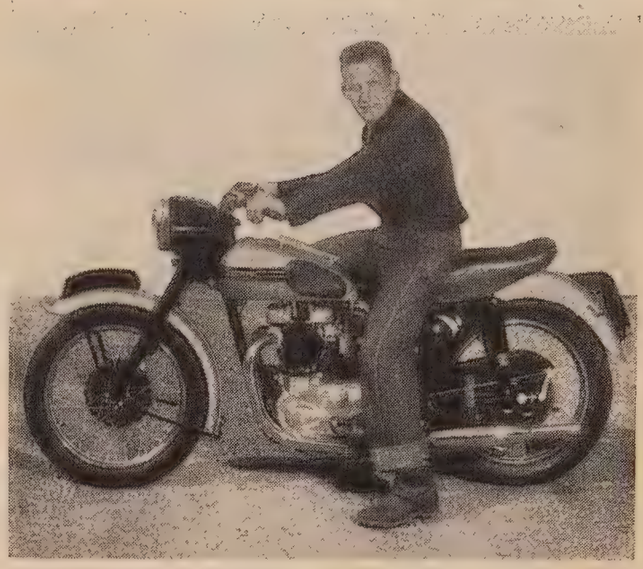
The 1954 hurricanes, although they did little damage to Seashore property, caused a short circuit that destroyed the home and barn of the Clough family next door who have acted as caretakers for many years. Members of the Seashore group have volunteerd to assist in rebuilding their property. For further fire protection the Sanford & Eastern Railway recently donated a 50,000 gallon water tower.

THE SAND SPRINGS RAILWAY passenger line has reportedly been sold to the Dawson Bus Co. of Tulsa, Okla., which hopes to have the trolleys out of operation by the time you read this. The Sand Springs line was remarkable in that it lasted so long as a trolley route. Only eight miles in length, it paralleled a highway for almost the whole way and used former lightweight interurban cars built thirty years ago.

A LESSON in how to ruin passenger business on an interurban line is reported in the November issue of the *Michigan Railfan*, monthly publication of the Michigan Railroad Club of Detroit, Mich.

According to last year's operating figures, the London & Port Stanley lost half of its passenger revenues of the previous year because of the winter starvation passenger schedule approved

Be Independent! Put YOURSELF on a TRIUMPH



NEW! Averages up to 140 miles per gallon. Unlike clumsy, heavy types. Has no "junk" or useless accessories. Is functional and *all* motorcycle from *head to foot*. Beautifully engineered. Triumphs are leading America's trend to two-wheeled transportation. Used by air line pilots, sportsmen, policemen, farmers, business men, service men, etc. Solves traffic problems—easy to ride, safe, maneuverable.

- "jet wing" double seat
- gear position indicator
- front and rear springing
- sparkling colors with chrome trim

WRITE for FREE catalog and name of Triumph dealer nearest you. Eastern or Western office, Dept. A.

TWELVE MODELS From $449.00

TRIUMPH®

"The World's Best Motorcycle"

West
JOHNSON MOTORS, INC.
267 W. Colorado St.
Pasadena 1, Calif.

East
THE TRIUMPH CORPORATION
1727 E. Joppa Rd.
Towson, Baltimore 4, Md.

ADDRESS POSTCARDS AT HOME!!
write BOX 14, BELMONT, MASS.

SONG POEMS WANTED
TO BE SET TO MUSIC
SEND YOUR POEMS TODAY FOR FREE EXAMINATION
J. CHAS. McNEIL
A.B. MASTER OF MUSIC
510-PF So. Alexandria Los Angeles 5, Calif.

★ ★ ★ ★ ★ **SONG POEMS WANTED** TO BE SET TO MUSIC
Send your poems for free examination
PHONOGRAPH RECORDS MADE
FIVE STAR MUSIC MASTERS, 620 BEACON BLDG. BOSTON, MASS.

"RADIO and RAILROAD TELEGRAPHY Home-Study Training. FCC Licenses Quickly. Also Pre-Exam Lessons. Results. Free Details. **Bell Communication School, 272 Parnassus Ave., San Francisco 17, Calif.**"

MAKE MONEY 90 WAYS IN PHOTOGRAPHY

Famous, low-cost method teaches you quickly at home—for profitable career, spare-time earning, or absorbing hobby. Co-ed. Also Resident Courses. Write TODAY! 45th Year. G.I. Approved.

SEND FOR FREE BOOK

NEW YORK INSTITUTE OF PHOTOGRAPHY
Dept. 77 10 West 33 St. New York 1, N. Y.

RUPTURE
RELIEF...OR YOUR MONEY BACK
Users say it's the best ever, widely copied never matched. Unconditionally guaranteed. Write for free book

WEB TRUSS CO., Dept. AM-3 Hagerstown, Md.

ARTHRITIS?

I have been wonderfully blessed in being restored to active life after being crippled in nearly every joint in my body and with muscular soreness from head to foot. I had Rheumatoid Arthritis and other forms of Rheumatism, hands deformed and my ankles were set.

Limited space prohibits telling you more here but if you will write me I will reply at once and tell you how I received this wonderful relief.

Mrs. Lela S. Wier
2805 Arbor Hills Drive - 249
P. O. Box 2695
Jackson 7, Mississippi

STOP COLDS
With Magic Chest Protector
and you don't have to cure them.
Warmer than wool. Protects most vulnerable spot which clothes do not. $1.00.
McComb Co., P.O. Box 247, New Castle, Pa.

by the London Railway Commission, a schedule which was again put into operation last fall. The timetable has been arranged so that the competing Greyhound Bus Co. takes over about half of the railway's daily traffic, including the profitable high-school patronage.

One of the remaining weekday commuter trains is not adjusted to the arrival and departure times of patrons who ride the line to work, while the other train competes with the Greyhound schedule. Ironically, a spokesman for the London Railway Commission pledged last year, "We will abide by the taxpayers' wishes," after the public voted against selling the passenger business to Greyhound. Yet the present schedules seem to benefit only that company.

Says the *Michigan Railfan*, "As long as the present management continues to operate the L&PS, we are wondering how much longer the passenger service can survive."

FOLLOWING THE ROUNDHOUSE FIRE last fall, the Waterloo, Cedar Falls & Northern's last interurban car, No. 100, began handling the service from Waverly through Waterloo to Cedar Rapids, while the remaining city car has taken over the Cedar Falls service.

Since the ICC has refused WCF&N permission to use the Cedar Rapids & Iowa City's lightweight interurbans as replacements, the line is said to be considering cars of the abandoned Lackawanna & Wyoming Valley's *Laurel Line* (Scranton to Wilkes-Barre, Pa.).

Jack Ecker, 2400 Grand Ave., Des Moines 12, Iowa, rode the last Fort Dodge, Des Moines & Southern interurban train to leave Des Moines before the flood last June. "My Dad and I were going to Boone," he writes, "but we got only as far as Ankeny because of a wash-out. The motorman, who has been on the line for forty years, told us that he had never seen a storm like it. Neither had I. It rained seven inches in less than an hour. Lightning hit the substation at Swan Wood while we waited for the strong winds and the rain to stop. It was a shocking experience, and the bolt sounded like a 240 mm. shell exploding."

It is to the great credit of the Fort Dodge Line that they worked for five months to get the electric line back in service. Passenger operation, a rarity among the few remaining interurban lines, now runs on the following schedule:

Leave Boone	8:30 A.M.
Arrive Ft. Dodge	10:00 A.M.
Leave Ft. Dodge	10:15 A.M.
Arrive Boone	11:43 A.M.
Leave Boone	11:55 A.M.
Arrive Des Moines	1:20 P.M.
Leave Des Moines	1:40 P.M.
Arrive Boone	3:00 P.M.

Railfans are indebted to the line for preserving the passenger service, and the FDDM&S is eager to cooperate with any railway organizations in arranging fan trips over the line. ●

HIS NAME IS A LOCOMOTIVE *(Continued from page 24)*

AFTER THE WAR the diesel era began with a vengeance. Builders couldn't produce new units fast enough. Taking its cue from EMD, Alco scrapped its steam production and steam-production methods and geared itself to assembly-line techniques. The gambit was successful. Today Alco's line, produced in Canada by the Montreal Locomotive Works, Ltd., parallels EMD's except that it has no "cow and calf" Transfer combinations just as EMD has nothing to compare with the DL-600.

Meanwhile Baldwin, having introduced a 2000-horsepower fast passenger and freight model, built for the Seaboard the world's largest single unit. This was a 3000-horsepower monster which nobody ever imitated and which even Baldwin abandoned as a dead end in diesel development.

Today, Baldwin-Lima-Hamilton, as Baldwin has become since the war, has a line of freight, switcher, and transfer locomotives adequate for most modern transportation problems.

Fairbanks, Morse & Company, which during World War II developed a double opposed-piston type engine for the Navy, began developing them for locomotive purposes and constructed its first diesel in 1944. Today her locomotives have been standardized into two separate groups, produced in Canada by the Canadian Locomotive Company, Ltd.—the C-line of road freight and passenger locomotives, and the H-line of road switchers, transfers, and switchers.

The latest FM types are an all-purpose 1600-horsepower switcher and the famous "Trainmaster," a large versatile 2400-horsepower freight or passenger unit.

During the postwar period, Electro-Motive consolidated its dominant position among diesel manufacturers. Today the company produces a full line of diesels, produced in Canada by General Motors Diesel Company, Ltd., ranging from 600-horsepower switchers to 2250-horsepower passenger locomotives, including, among others, the following types:

E-9, high speed passenger, A and B units, capable of hauling the heaviest trains at high sustained speeds with a smooth flow of 2400-horsepower from each dual-engine unit.

F-9, combination freight and passenger, and FP-9, a longer and heavier version for heavy-duty passenger service. Each can operate as a single unit of 1750 horsepower or in 3500, 5250, or 7000 horsepower multiple combinations.

GP-9, general purpose 1750-horsepower road switcher, EMD's current best seller.

SW-600, SW-900, SW-1200, switchers having 600, 900, and 1200 horsepower respectively.

TR-1200, transfer locomotive, double units in "cow and calf" arrangement—virtually an SW-1200 switcher with a permanently coupled unit of the same power without any cab or controls of its own.

These diesels last. Only recently the Southern Pacific's oldest diesel passenger unit, *Queen Mary*, which once hauled the *City of San Francisco*, emerged from the repair shops completely rebuilt—after nearly fifteen years of service.

Dr. Diesel could be proud. He could scarcely have envisioned such a triumph on his last night, when he walked the deck of the steamer bound for England. He could not have known that his engine would rule the rails of a continent. And if now, those gas or steam turbines thundering through the darkness of Virginia or Wyoming, should some day take over, his achievement will be no less great. ●

THE LONG ROAD

(Continued from page 39)

"I need an operator to send up to Windigokan tonight," said Carlin. "Where'd you sit in last?"

"Belleville on the Canadian National."

Carlin fished for the joker. "Belleville too tame for you?"

"No," said Matt. "I quit with a clean sheet. Personal reasons, if you like."

"You want the job?"

Matt parried the question. "Does anyone named Tallon run out of Stone Creek?"

"Yeah, an engineer. Has a son who just moved into a night slot on the train-sheet here."

"The old man, that'll be the one. I'll take the job."

THAT NIGHT, Matt caught a train of wheat empties, and in due time he dropped off at Windigokan; but even before his polished shoes hit the cinders, just about the whole division knew of his arrival and a little more besides.

It started from the dispatcher's office at Stone Creek. Jim Tallon, high-wheeling hogger with a cool disregard for everything but his own throttle prowess, learned about Matt Fenn from the chief and started asking questions.

"Don't know much about him," said Carlin. "Just what's on the form here. Pounded brass in Belleville. He's on his way to Windigokan tonight." The chief waited, not mentioning Matt's interest in Tallon.

The engineer grunted. "Knew his old man on the Canadian Pacific fifteen years ago when I was runnin' outa Calgary. He was a conductor. One night he took a coal drag out ahead of me. They busted a wheel forty miles out, and I smashed into 'em with thirty reefers." Carlin showed a flicker of interest as Tallon went on. "There wasn't enough left o' that caboose to build a shelf. Fenn and his rear brakeman went to glory."

The chief's eyebrows knit. "Who was flagging?"

"Nobody. When we got the bodies out, they smelled like a distillery."

Carlin whistled softly. There was an implied connection in Tallon's heavy whisper that eager ears were quick to grasp. And later, the telegraph tomtoms clattered up and down the main line, and Windigokan knew about Matt Fenn before he hung up his Stetson hat.

MATT felt at home almost as soon as he rolled his sleeves up, and the division was quickly assured about the new night man at Windigokan.

The operator at Poplar Lodge, fifteen miles west, formed an early opinion. Right after midnight there was a lull, and Matt heard the sounder calling "WD . . . WD . . . WD."

He snapped the key and acknowledged, listened to the message: "PL says wlcm to Dominion Central."

Matt smiled. There was a slow, methodical cadence to the sounder, with a very slight hesitancy. He opened the key, and the letters flowed like velvet from his wrist. "Thnks . . . glad to know you . . . wht's yr name?"

There was a brief pause, and then: "Frances Carlin. How do you do?"

Matt cut in: "My God a woman?"

The pause was longer this time. The sounder seemed to have a new tone, a brassy defiance as it clattered back, "Yes wht's wrng with that?"

Matt answered; "Things sure tough on Dominion Central." Before he had completely finished she broke him with a curt "I thought so too whn I saw you at Standing Stone."

Then he remembered the auburn hair and the clear blue eyes; and the name *Carlin,* which had passed unnoticed in his surprise at learning his nearest neighbor was a woman, suddenly suggested another question: "You related to chief dispr?"

The dots and dashes that clattered over the wire formed the words, "He's my father."

Matt didn't know what to say to that one. A week later, the division heard more about the Windigokan op. There had been rain for three days. A steady, drizzling downpour that soaked into the right-of-way and gurgled off in the full-running ditches. It was cold, chilling autumn weather.

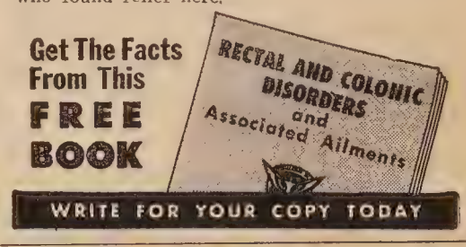
Matt sat in his chair, head-set draped over one ear, listening to the voices of the Dominion Central.

A westbound manifest, No. 401, had

FISTULA can be a THREAT!

Fistula, piles and other rectal and colon disorders can be a serious threat to your health, particularly when neglected. You can get the facts—learn the dangers—from the 140-page illustrated book prepared by the McCleary Clinic and Hospital. It describes symptoms, causes and treatment.

Write for a copy today. Address McCleary Clinic and Hospital, 349 Elms Blvd., Excelsior Springs, Mo. This book also contains a reference list of several thousand men and women who found relief here.



Find URANIUM!!
GEIGER COUNTERS for uranium detection. All models and sizes — from low-cost, portable to super-sensitive airborne units. Prices start at $37.50.
Also TREASURE DETECTORS and MINERALITES. • FREE INFORMATION •
Detectron CORP. Dept. 9-A
5420 Vineland, N.Hollywood, Calif

Have Fun! Entertain Friends!
MAGIC DECK OF CARDS
Looks like ordinary deck of 52 cards and can be used for regular games. Instructions included for many amazing tricks. No Skill required! Rush $1.00 for Magic Deck and we will include large catalog of 500 tricks for parlor, club or stage.
D. ROBBINS & CO., Dept. M-8
127 W. 17th St., New York 11, N. Y.

JUNGLE EXPEDITION
Organizing now

Four weeks of photographic adventure, hunting, fishing, exploring among Central America's most primitive Indians. Write:

BOLDER LANDRY SAFARIS

P. O. Box 24093, Los Angeles 24, Calif.

HANDS TIED?
—because you lack a HIGH SCHOOL DIPLOMA

• You can qualify for an American School Diploma *in spare time at home!* If you have left school, write or mail coupon for FREE booklet that tells how. No obligation of any kind.

OUR 58TH YEAR

AMERICAN SCHOOL, Dept. V-349
Drexel at 58th, Chicago 37, Illinois

Please send FREE High School booklet.

Name.....

Address.....

City & State.....

Canadian Residents: Complete Canadian Course Available. Write American School, 1610 Sherbrooke St. West, Montreal.

just been reported through Watson, the first station east of Windigokan. That would be Jim Tallon wheeling it. Matt could visualize the big Mikado pounding over the rise and dropping down the long hill west of Watson. There was nothing for Tallon at Windigokan. The hogger would keep her rolling through the sag and would work steam all the way, to give him a run for the long grade up toward Poplar Lodge.

Matt couldn't believe his ears when he heard the operator at Poplar Lodge come in on the line. Frances Carlin. Her voice was crisply efficient, yet pleasing, when she said:

"OS Poplar Lodge, wheat extra 3360 east through at 11:06. Sorry I'm late. Office door blew shut and locked me out on the platform. Came back in through the window."

Matt looked at the clock. That wheat extra was six minutes out of Poplar Lodge, driving east. That would put him about twelve miles from Windigokan. Tallon's 401 would be closer than that, coming the other way. Matt felt a prickle stirring the back of his neck.

He dropped his foot on the pedal of the dispatcher's phone, cut in to Stone Creek. He knew it was Tallon's son, the youngster, who answered. A green hand on the train-sheet. In swift, sharp words he barked: "Where's that Extra 3360 going for 401?"

The division held its breath. There was a pause. Then the voice came back in the head-set, brittle and unsure. "Who's that . . . Windigokan? What are you talking about?"

The dispatcher, young Tallon, hadn't caught it.

"You've got a lap out. A real beauty that'll kick the hell out of your train sheet. Hold it . . . I see a headlight. Let's get the 401 off the iron. You figure out the next move!"

MATT FENN threw the board to red and slapped his Stetson on his head. Grabbing the lantern and two fusees from under the table, he stuffed torpedoes into his pocket and dashed out on the rain-soaked platform.

Tallon's thunder burst into the open. His headlight topped the hill eastward, sweeping and washing the granite rock walls and the dark masses of glistening wet jackpine.

Jim Tallon had no reason to expect anything for him at Windigokan. His son, sitting back there at Stone Creek, had set 'em up for him all the way. The old hogger had faith in his son. He'd keep 'er latched out, probably dozing a little, maybe even slightly dazed by the contents of the brown bottle in his grip—like the time back on the Canadian Pacific, the time he'd gotten away with it.

Matt felt something grab his stomach as he snapped the cap off a fusee and swung it viciously into the soggy wood of a tie. A cherry-red ball mushroomed behind him.

He ran on toward the blossoming glare of the headlight, fumbling with lead torpedo clips. Then he heard the engine shut off, with two wild raps of the whistle. Rings of fire lit up the running gear. The air was filled with the acrid smell of burning steel, shrieking, slipping, protesting, and the headlight starkly outlined the passing track switch.

Matt caught his first hint of the other train whistling over the shoulder of the western hill. He took a quick look at his red board, twinkling imperiously and wetly from the staff above the station.

Then he made a quick decision. He sprinted for the passing track switch, dragging a key out of his pocket as his long legs burned up the ground.

The 401 was coming under control, but still rolling heavily—and rolling close! There'd be no second chances on this move. Matt flipped the lock, snapped up the handle.

He could feel the hot breath from the cylinders even as he threw his weight into it. He felt the bite of the pilot wheels against the points even before he got the switch handle shoved right down again.

The brass pounder grabbed at the gangway rails and hung on the bottom step for an instant before pulling himself up. He could see Tallon fighting her, with brake and sander, bucking his fifty-five cars to a halt. Matt yelled at him:

"Don't stop now! Douse your headlight after you've run into the clear!"

Now they could all see the yellow glare of the wheat extra topping the western rise. Matt dropped off the engine as she pounded past the station. He stood on the platform watching the rear end of the manifest snaking into the passing track. Close, he thought, but it'll have to do, I guess.

Finally he entered the station, threw the board back to green, and watched the wheat extra bucketing down from the west end.

Twenty slow, long, perspiring seconds passed. The manifest caboose lurched over the frog, the switchlight blinked and showed green. Matt took a deep breath.

The wheat drag was beating her hard. Her stack chuckled with a throaty roar as she picked up speed for the hill down which the manifest had just dropped. She went through in a blast of thunder, and the markers of her crummy sizzled past like the flicking end of a bull-whip.

Matt sagged back from the window, humming a little tuneless air as he sat down in front of the dispatcher's phone. Carefully he picked up the head-set. He tramped on the pedal and squinted at the clock.

"OS Windigokan. Extra 3360 east, through Windigokan at 11:23."

You could feel a sigh of relief going up all along the division.

"Meanwhile," cut in the operator at Matt, "there's a hopping mad crew off the 401 coming into my office now, and they look as if they think someone has been a very naughty boy."

The telegraph sounder in front of him began chattering with that familiar methodical cadence. Just slightly hesitant.

"Nice work WD." Only that. Amused, Matt flicked the key and shot back in clipped Morse: "Thnks stay inside next time and don't get lcked out."

The answer was brief: "Go to hell!"

Matt Fenn gasped. He'd never expected such language from a chief dispatcher's daughter. But he remembered her voice as he had heard it on the Stone Creek station platform, and the remembrance made him feel good.

"I LIKE your style, Fenn," said Carlin, the next afternoon. "That's why I called you down here. So I could tell you."

"Thanks," said Matt, settling himself against the window in the chief's office.

A gray rain still fell outside, sopping into the ballast and gleaming against the car sides.

"How did you catch that face-up?" he lied glibly. "I'm curious."

Two and two fell together quickly in his mind, and the yellow service telegram before him confirmed it.

Matt grinned. "I had the head-set on. You hear an OS report, and then another, and automatically you start figuring where they're going to meet." The smile faded. "Near as I could figure, they'd meet in a rock cut about four miles west of me—and that's not very tidy."

"Why didn't you tell me that you'd been a dispatcher, when you checked in here first?" Carlin waved the yellow telegram idly.

Matt evaded: "Call it personal reasons, if you like."

The chief and Matt Fenn sat there for thirty seconds in silent appraisal.

Carlin spoke first. "You're through at Windigokan. I'm putting you back on a train-sheet. Need a new trick dispatcher here."

Matt sighed. "What are you doing about Tallon's kid?"

"What do you think?"

"I think you shouldn't," said Matt carefully. "He was too green to be put in the slot in the first place, you know that. That's where the real mistake lay."

Carlin shook his head. "I'm sorry, Fenn. I'd like to, but I can't take a chance. He's young enough to pick up from scratch somewhere else. I've got to let him go."

"Okay," said Matt. "I'll be going, too."

"Now wait a minute . . ."

Matt was on his feet, bringing the Stetson up to his head. The chief was around the desk in a second.

"Sit down, Fenn, sit down! Why all this interest in the Tallons, especially from you?"

"It isn't the Tallons. It isn't even one Tallon. I don't care who it is; it's just a question of what's right."

Carlin slumped wearily back to his seat. "Okay, Fenn. So we give the kid another chance. Out on a station trick. But I'll be watching every move he makes."

"So will I," said Matt.

"Now then, lay off a couple of days and take a swing over the Dominion Central. I want you to know exactly what kind of checker-board we're playing on."

Matt stretched easily.

"One more thing," said Carlin. His face was serious now. "I think I know about your interest in Tallon—the old man, I mean. Now listen: don't start anything!"

"Why?" Matt asked icily.

"There's enough to keep a man busy without personal grudges. I know it's a long road, this feuding, and it never leads to any place but trouble."

Matt's voice was slow and hard. "I don't intend to interfere with the running of trains, Mr. Carlin. And I'm not out to make your job any tougher than it is, God knows. More than that I won't say."

The chief frowned. "All right. I'll drop it. But remember what I said."

"I will," Matt promised.

"Also, don't be getting too friendly with the operator at Poplar Lodge."

"Your daughter?"

"Yes. Just remember we're short of operators and—well, don't be getting any ideas."

Matt gave a faint scowl but controlled himself and stepped out into the driving rain.

NEXT EVENING at 5:15 the 401 simmered gently in the Stone Creek yards, ready for her westbound plunge into the hills. Jim Tallon was already slouched in his seatbox when Matt Fenn bounced his grip into the gangway and swung up behind it.

"Hello, Tallon!" said the dispatcher, "I'm takin' a look-see from the front end tonight."

The hogger didn't answer. Instead, he blasted two long ones to let the rear end know that his train line was pumped up. A highball from the caboose told him to get out of town. Matt he ignored completely. Left to his own devices, the visitor balanced on the rocking deck as the 3304

Made $2,600 LAST SEASON

with FOLEY LAWN MOWER SHARPENER

99c Profit On Each Dollar

It costs less than one cent per mower for electricity and material. The Foley sharpens all blades and cutter bar together **just like lawn mower manufacturers do it.** Start in spare time in basement or garage. The Foley handles up to 3 or 4 mowers per hour—prices run $1.50 to $3.00 for hand mowers—$5.00 to $8.00 for power mowers.

FREE VALUABLE ILLUSTRATED BOOK shows how to sharpen all leading makes of power mowers. Foley prices are low—easy payment plan lets you pay for machine with profits. FREE PLAN tells how to start—no canvassing. Send coupon today—no salesman will call.

"Last year we sharpened and repaired about 1000 lawn mowers for a net profit of $2,600," says E. G.

"In 1939 I bought a Foley Lawn Mower Sharpener," writes W. T. J., "the best investment I ever made. I have made a good living for my wife and myself, and have put money in the bank besides."

SEND FOR FREE BOOK

FOLEY MFG. CO., 385-5 Foley Bldg., Minneapolis 18, Minn.

Send FREE BOOK and FREE PLAN on Foley Lawn Mower Sharpening business.

Name. . . . . .

Address. . . . . .

STOP MAKING MISTAKES IN ENGLISH

With the new CAREER INSTITUTE METHOD you can stop making mistakes in English, build up your vocabulary, speed up your reading, improve your spelling, acquire real writing skill, learn the 'secrets" of fluent conversation. Hundreds of men and women have become effective speakers, writers, and conversationalists—without going back to school—by using the CAREER INSTITUTE METHOD. Costs little. Takes only 15 minutes a day at home. 32-page booklet mailed FREE upon request. Send card or letter NOW! Career Institute, Dept. E-584, 25 E. Jackson, Chicago 4

EARN OVER $25 WEEKLY

Address Our Postcards at Home
Good Handwriting Necessary

WRITE ATLAS BOX 188 Dept. 13 MELROSE, MASS.

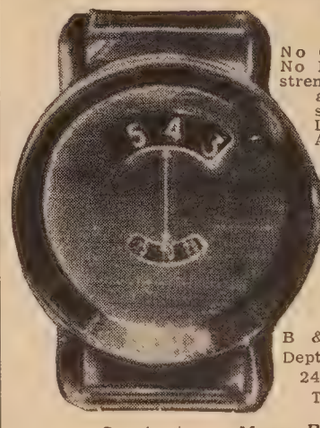
MEN

Glandular Inflammation?
Night Rising?
Lost Vitality?

If you suffer any of these symptoms, write for FREE BOOKLET that tells of our mild, NON-SURGICAL treatment. Write today to Dept. M-5

The Kansas City Clinic
920 Oak St. Kansas City 6, Mo.

THE NEW 1955 FLIGHT LIEUTENANT HANDLESS WATCH



No Glass. No Dial. No Hands. Built for strength, fitted with aircraft shock-resisting movement. Lever escapement. Antimagnetic and recoil click spring to prevent overwinding. Encased handsome chrome case. Time shown by revolving figures. Full guarantee.

$3 DOWN. Cash Price $24.95.

B & W IMPORTS
Dept. AMG1, Room #7
2498 Yonge Street
Toronto, Canada

Satisfaction or Money Refunded.

lurched out of the yards. The yard-limit board swam by, surrounded by a golden blur of raindrops.

Later, Matt leaned over the engineer. "You really count the bugs in your headlight now, don't you, Jim?"

The engineer growled. "What're you talkin' about?"

"Just making talk. Struck me you run 'em a lot different from the way you did on the Canadian Pacific."

"I've been away from the CP a long time, Fenn. I've kept my mouth shut and tried to forget. Seems you'd have even more reason to do the same."

Matt edged in closer. "I was reminded of it a few weeks ago by a guy I met."

"What guy?"

"Just a bum. I staked him to pie and coffee one night in Belleville. He said he'd been in a pile-up in a rattler that plowed into the rear of a freight."

Tallon kept his eyes straight ahead, teasing the throttle, slipping a few pounds of air under the wheels as they heeled off the tangents. More miles unrolled beneath the spinning wheels.

"So you come all the way up here to tell me about a bum who was in a rear-ender?"

"Yep. Mere coincidence, of course. This rear-ender was on the same division. And, do you know, the date was exactly the same date you piled into my dad's train!"

"It's tough, kid, but you won't make it any easier carryin' grudges. You're not to blame for your dad's mistakes."

Matt spoke coldly. "The bum was full of a big story, Tallon. A story of how the train blasted through two guns and a red fusee before shutting off. The bum was on the tender, and he says they didn't hit the air until the pilot was almost under the caboose stalled ahead of him. Now what do you think of that?"

"I think, Fenn, you're all excited over the fairy tale of some broken-down tramp. You've forgotten the results of the investigation. The flagman was found *in* the caboose wreckage. How in hell could he have busted out a fusee on me?"

Matt clenched a fist.

"The bum *saw* the fusee, Tallon. And you *did* run his guns!"

"Sure, I did. And do you know why?" He turned on his seat, his eyes glowing. "I run those guns because they were planted about two hundred feet back of the hack. Talk about short-flaggin'!"

Matt shouted: "It's no go, Tallon. I believe the bum. Tell me the truth!"

"This I'll tell you," Tallon yelled back, more air under his wheels.

On Next Month's Waybill

MERRY-GO-ROUND: the detailed story of turntables in the steam and diesel eras, by Ejler Jakobsson, with many good photos—and a great front-cover painting of oldtime Colorado narrow-gage operation by Philip A. Ronfor

PAUL N. WHITE, tycoon of the *Plywood Empire Route*, will tell you how to build a model "arm-strong" turntable

ALL-TIME locomotive roster of Boston, Revere Beach & Lynn

COMMUTERS' NARROW-GAGE, by Harold Cook, an illustrated history of the famous BRB&L in its steam and electric days

ILLINOIS TERMINAL RR., by Alexander Turner, with choice pix from readers far and wide

PLUS other fact articles, true tales, fiction, short hauls, popular departments

"You're unloadin'. Off this engine—right here at Poplar Lodge!"

"That won't be the end of it."

"Oh, yes it will! And I'm turnin' you in at the end of the run. I'll have Carlin whip you off this division."

MATT'S FEET hit the station platform at Poplar Lodge. The answer he searched for still evaded him. He heard the quickening stutter of wheels over rail joints, the clang of draft gear as the big Mike yanked out the slack, stormed into the rain.

The caboose markers swam up fast. Matt realized that Tallon had never intended him to catch the caboose at all. With a surge of fury he prepared to latch onto a grab-iron.

Then a flood of yellow light from the station door outlined the girl. She caught sight of Matt, screamed at him. Her words were lost over the racket of the train.

A moment later Matt was grasping her shoulders, staring into the face, rain-soaked and wide-eyed with fear.

"The Aspen bridge!" He got that much from Frances, and that's about all. Something about a message that just started to come in as Tallon's engine crashed over the siding switch.

Matt let her go, and stumbled forward beside the train, his strong arms reaching for an end ladder. He grabbed one, feet fumbling for the bottom step, bouncing off a journal box and then into the comparative safety of the steel stirrup.

The wind whipped and tore at Matt's body as he dragged himself to the roof. Then he started forward across the swaying car-tops, leaping the gaps carefully, ducking his head against clouds of engine smoke.

Aspen bridge! He could guess the trouble, with all the rain they'd been having. Normally a trickle, the Aspen had swollen to an ugly rolling flood.

The bridge stood eight miles from Poplar Lodge. Only five from where the train was now. Tallon was really wheeling 'em, making up the precious few minutes that he had lost at Poplar Lodge.

By the time Matt reached the tender, he could see the faint ruby glow of two lanterns strung up on the track ahead of the bridge. He saw Tallon, too. The hogger was leaning across the gangway, shouting with laughter at the fireman and the head shack. Nobody was looking ahead at that precise moment. Everybody missing the precious seconds!

A torpedo that exploded deafeningly beneath the wheels brought Tallon back to reality. In two swift motions he wiped the clock and latched onto his whistle cord. The train shuddered, checked, and slid on rain-greased rails towards those looming lights.

SHE ALMOST MADE IT. At fifteen miles an hour the brakeman and fireman unloaded. Tallon stood doggedly at his seat, fighting with sander and reverse lever, but the seconds he had lost could not be won back.

Matt Fenn leaped. He felt himself

rolling over and over in a water-filled ditch. As in a dream, he saw the engine nose out slowly onto Aspen bridge, then settle to the left and sink despairingly into the water. Her fire-doors blew open and a rush of steam enveloped the cab.

Matt didn't know how he got down to the river. His first awareness came from the ice-cold water of the roiling Aspen tugging at his thighs as he struggled toward the engine cab.

He saw the huddled form of Tallon, hanging half out of his cab window. The water almost covered his shoulders. Head was dropping forward weakly, then straightening up, to drop again.

Matt groped around, tried to pull him clear. He was caught firmly, legs wedged between the seatbox and the reverse quadrant. He wouldn't move from there until the wrecker arrived, with tools and equipment to free him from that crushed cab.

Matt seized the massive head, held it up clear of the water. His feet were braced against the current, his back close against the sloping cab side. He couldn't go for help, for if he did the old man's head would fall forward and Tallon would drown in his own engine cab. He could only wait.

And there in the muddy flood, holding up the head of the man he hated, Matt saw again his father's face. He remembered how he had hated his father after that wreck of years ago. Long after the big hook cleared away the mess, he felt the shame of what his father had done. Then he had run away from it. Later an old hobo who had ridden Tallon's train that night had straightened him out on the story, and he had taken the long road again. This time the road to Jim Tallon, the cause of it all, but in reality still running from himself. Still running from the fact that he had lost faith in his dad.

Dimly, Matt heard a distant whistle, blowing and wailing from a distant world. It was unreal, and far away. Reality was here, in the river against a shattered cab with rushing waters tearing at his legs, waters rising and reaching to snuff out the life that he held up from its grasp.

Matt felt himself slipping into the water, felt the engineer's head slipping, imperceptibly, closer to the lapping waves. The strength was draining out of him. A black delirium set in, blotting everything else out. Then a girl spoke.

"There he is, down by the engine!"

Vaguely, Matt heard those words, and remembered the voice.

THE ANTISEPTIC SMELL of the hospital was the first thing Matt Fenn was conscious of. Next he recognized Carlin, the chief dispatcher, seated at his bedside, squinting at him. Matt smiled feebly. The chief coughed and said:

"Did you have to pick the hard way to look over the Dominion Central?" He was grinning. Matt extended a weak hand and grasped the chief's horny paw.

"How's Jim Tallon?"

Carlin answered: "Alive. Looks like he'll stay that way now. Thanks to you."

"That's good."

"He had a lot to tell me."

"Yeah?"

"Told me about a rear-ender on the Canadian Pacific. Rule G. Ran a red fusee. The flagman was hit by Tallon's pilot and carried into the wreckage. Tallon himself smashed the whisky bottle in it. He's ready to sign a statement for you."

Matt wanted to cry. "To hell with a statement! How many people has he told?"

"Just me. You're the only other one that knows—you and that bum, but God knows where he is."

Matt nodded. "It doesn't seem to matter now. I forgot all the hate I ever knew—out there in the Aspen."

Carlin went on: "Oh, there's a visitor who wants to see you. My daughter Frances."

"Hi, railroader!" she called out. "Taking a vacation?"

Matt's heart leaped with joy. That voice sounded even sweeter than when he'd first heard it. He looked at hair with the sheen of new copper, and a warm smile.

"Hi!" he grinned.

Carlin ducked out the door. The girl drew closer, and Matt realized suddenly that he had found a pair of inexpressibly blue eyes at the end of the long road. ●

SAVE 75% ON WORK CLOTHES!

SURPLUS STOCK FROM MID-WEST SUPPLY FIRM! Terrific values you've got to see to believe!

SHIRTS 79¢ Made to sell for 2.99! Now Only 4 for $2.99

What a buy! 4 for the price of one! These shirts, though used, are washed, sterilized and ready for long, tough wear. In blue or tan. *Send name, address, neck size.*

PANTS *to match* 99¢ Sold for 3.95 now only . . . . . 4 for $3.75

Unbelievable Bargains! *Send waist measure and inside leg length.*

COVERALLS . . . wear 'em used and save plenty! Originally 5.95. Now only . . . . . $1.95 3 for $5.75

Send chest measurement.

SATISFACTION GUARANTEED! Your money back if you can beat these bargains anywhere! You can't lose so order TODAY for immediate delivery! Pay postman or send money with your order and save postage. $1.00 deposit on C.O.D. orders.

GALCO SALES CO. Dept. 403

7120 Harvard Ave. • Cleveland 5, Ohio

"The Book of year" for you to buy.
Order a copy. Give it a fair try.
A penny a day, $3.65 per year, post paid.
You'll agree, the best purchase, you've ever made.
"Ritchie's Universal Time and Budget Book."
Get your order in now. It has the new look for anyone who works for wages.

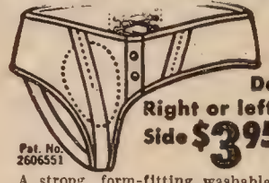
John S. Ritchie • Box 64 • Grand Jct., Colorado

INVENTORS

If you believe that you have an invention, you should find out how to protect it. We are registered Patent Attorneys. Send for copy of our Patent Booklet "How to Protect Your Invention," and an "Invention Record" form. No obligation. They are yours for the asking.

McMORROW, BERMAN & DAVIDSON
Registered Patent Attorneys
150-D Victor Building Washington 1, D. C.

RUPTURE-EASER
T.M. Reg. U.S. Pat. Off. (A Piper Brace Truss)



Double...4.95

Right or left side $3.95 No Fitting Required

Pat. No. 2606551

A strong, form-fitting washable support. Back lacing adjustable. Snaps up in front. Adjustable leg strap. Soft, flat groin pad. No steel or leather bands. Unexcelled for comfort. Also used as after operation support. For men, women, children. Mail orders give measure around lowest part of abdomen and state right or left side or double. We prepay postage except on C.O.D.'s.

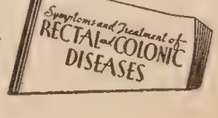
PIPER BRACE CO.
811 Wyandotte Dept. AMG-35 Kansas City 5, Mo.

Dangers of PILES:

What Are They? How To Help Avoid or Treat Them?

FREE BOOK TELLS ALL

Actually, it's nearly always **neglect** of piles (and related disorders such as fistula and colonic and rectal troubles) that can cause such serious results. Learn how to deal with them without fear—write today for important free book to Thornton & Minor Hospital Suite 205, 911 E. Linwood, Kansas City 9, Missouri.



MAIL CAR

(Continued from page 9)

hoses . . . cleaning fires on the pit at Hall . . . romance and clinkers . . . running for coal and water. Do you call that glamour?

"How much enchantment was there in doubling Fairground Hill on a freezing winter night? And where was the fascination, when you headed for home, to hear those three little words, 'Turn at Hall'? So you didn't go back to a cozy home and a warm bed; you turned at Hall and started the 'glamour' all over again. Yeah, and your wooden cab was rickety, your boilerhead minus lagging.

"Consider the breed of men who handled those coal-eating dragons. The men improvised, invented, alibied. Their heads are ringed with halos of steam and smoke. They had courage, ingenuity, and steel nerves. They worked hard and lived hard.

"So hats off to the grayheads who handled and mishandled the old man-killers down through the corridors of Time. Don't forget the bakeheads, either, and the boys in the little red hack. Railroaders all! You will never see their like again. But neither they nor the hogs were glamorous."

Craddick has written a poem called "Those Engines of Long Ago":

Ghosts of the past, how they haunt me still,
Those engines of long ago!
They frequently died with a sullen chill,
Those engines of long ago.
The smoke from their stacks would blot out the sky
And cinders danced right into your eye.
I'll remember them till the day I die,
Those engines of long ago. •

1913 SAW the completion of a steam railroad built from Stone Harbor, N. J., to Cape May Court House. A year later a jolly trolley car began operating on the same track, meeting Philadelphia & Reading trains at the Court House. One of our good friends, Granville Thomas, 617 Mulberry St., Millville, N. J., sent us a picture of this oddity. The original appeared in the *Stone Harbor Herald* in July, 1914, but we had it copied by a pen-and-ink artist (J. E. Honan, New York Central brakeman) to make the clear reproduction shown on this page.

The *Herald* said, "Practically all visitors come to seashore resorts by trolley or train." Mr. Thomas comments: "What a change in today's travel! The steam road operated for years and then dropped passenger service. A freight run lasted longer. But just a few months ago the state and the railroad joined in discontinuing all service on that line. The picture is a souvenir of days you will never see again." •

HARRY BEDWELL, the fiction writer, used to hand train orders up to me when I was pulling freight and passenger on the SP's Los Angeles Division at Santa Susana," recalls George W. Booth, 144500 Sayre St., San Fernando, Calif. "As for the excellent story written by the late Charlie Tyler (Oct. issue), 'Make Way for the Eastbound,' I have one small complaint to make. The dispatcher in that story issued orders not in accord with A.R.A. rules. For example, he gave this order: 'No. 1 wait at Desert Jct. until 10:15 ten fifteen PM for First No. 10.' This is a proper order. But a few paragraphs later he refers to the wait order as a meet order which the dispatcher changed to, 'Meet at Sage instead of Desert Jct.' This is improper.

"Such things happen to busy dispatchers. However, the engineer on No. 1 would have had to wait at Desert Jct. until 10:15 p.m. regardless of the meet at Sage. Also, this was automatic block signal territory, and the two trains could not have been so close together unless one or both hoggers had run several block signals." •

100TH ANNIVERSARY of the Panama Railroad was marked by a special Canal Zone postage stamp issued January 27th by the United States Government. It is a purple 3-cent stamp with a design based on an old woodcut from *Harper's New Monthly Magazine* of 1859 showing a Panama passenger train pulled by a balloon-stacked locomotive. •

A BELL from a scrapped Erie locomotive is now tolling for African natives, including school children, in the Belgian Congo at the Blukara jungle mission. It took months for the bell to journey from Meadville, Pa., to its destination—across the Atlantic, through the Mediterranean and the Red Sea to the East Coast African port of Mombasa. Then came a trip by rail.

"It was an exciting time when the bright, shiny bell rolled out of its case," writes the Rev. Edward G. Schuit, American missionary. "The first surprise to the natives was its weight. Some half-pints almost crawled inside to see what it was made of. Now, atop the thatched roof of a mission building, the bell can be heard for miles." •

Steam met juice on same track at Stone Harbor, N. J., 40 years ago. (Note horseless carriage also.)

Pat Anderson, crew caller's daughter

MISS RAILROAD MAGAZINE of the month is Patricia Anderson, 18. Pat is receptionist at Lucy Lee Hospital in Poplar Bluff, Mo., a Missouri Pacific division point, and the daughter of Clyde Anderson, crew caller.

"My father's passes have enabled me to travel through 36 states as well as Mexico and Canada," she says. "I like the varied scenery and the interesting people you meet on trains. My ambition is to get a job as train stewardess.

"Daddy has been employed by the Missouri Pacific for 12 years. He knows all the train and engine men who run out of Poplar Bluff, and so do I. You see, I get around with him quite a bit. Besides, I often go down to the depot and watch the trains." •

LET'S FACE IT. A lot of readers don't like our fiction stories. They said so in a flood of mail. They object to jittery fast action, phoney heroics, inaccuracies, weak characterization, and stale plots. They are fed up with the moss-covered formula of misunderstood guy who makes good. They want stories based on operating problems, with characters who talk and act like real people. They demand good writing.

And they are right. A man who pays 50 cents for a magazine is entitled to the best.

Some readers urge us to print two or three fiction stories a month; others say, "Cut out fiction altogether." It seems we can't please everybody.

"Have been reading *Railroad* since 1910," writes Leonard W. Rice, 5929 Fourth St., N. W., Washington, D. C. "Your 'new look' is a vast improvement, but your fiction isn't."

James Allen, Jr., Box 25, Tweed Ave., Steubenville, O.: "I read for relaxation and to get a personal idea about railroads of today and yesterday. Can't get any more interested in highly painted-up adventure yarns than I can in tabulations of figures like mile-a-minute runs."

"Your fiction contains too little railroad information," complains Robert A. Ramsay, 527 S. Hobart Blvd., Los Angeles 5, Calif., "and railroad information is the main reason why I buy your magazine."

Says William Cadmus, 2355 Austin Highway, San Antonio 9, Texas: "Railroad fiction leaves me cold, due to various inaccuracies that only an experienced boomer would notice. Such yarns as I have tried to read have seemed to be a hodge-podge of outlandish conversation written in the pointless style of a lurid imagination."

These are typical of numerous letters. Now listen to our side of it. Each month we publish the best railroad fiction story we can find anywhere. That is true. We are continually trying to get yarns of high quality—for example, "The Long Road"' on page 38.

Is that a problem? you ask.

There is too little demand for railroad fiction in the big-circulation magazines. Harry Bedwell discussed the matter in *Mail Car* last month. It would seem there is not enough incentive for really good authors who know their railroading to specialize in this kind of writing.

A man who supports himself by creating fiction has got to turn out the kind of story that has several possible markets. He can't live on one market alone. If his pet editor turns down a manuscript, he should be able to sell it elsewhere.

Plenty of railroaders can produce a story that will please their own relatives and friends, but to write for a nationally-circulated magazine is a horse of another color. •

LARGEST Great Northern diesel shop west of the Rockies was opened recently at Spokane, Wash., with a two-day community fete sponsored by Hillyard Commercial Club. The GN has been the chief industry of the once-independent town of Hillyard (now part of Spokane) since 1892, when James J. Hill built into Spokane and set up his shops and yard. The town was named for him.

OWN BUSINESS

WITH A POTENTIAL MARKET OF 50,000,000 CUSTOMERS

New shop-method, home-training system gives you electrical know-how that used to take years to learn. Learn at home by building valuable testing kits, repairing your own and neighbors' appliances. It is not unusual for appliance repairmen to charge on the basis of $5.00-$6.00 an hour.

FREE ILLUSTRATED BOOK

Shows you how to learn every phase of electrical appliance. How to make money while you learn. Write today for your FREE copy.

CHRISTY TRADES SCHOOL

DEPT. D-128
4804 NORTH KEDZIE AVE., CHICAGO 25

For bald-headed and thin-haired.

We can help you obtain the world-renowned Danish COMOS HAIR-BALSAM. On receipt of your request we will send you with pleasure all particulars (fully free).

MAISON KJELDSEN, Godthaabsvej 10 Copenhagen. F. Denmark. 4 (Europe)

EXPERT DICE CARDS, INKS, etc.

STRONG! RELIABLE!
FREE CATALOG—Send for it Today!
O. C. NOVELTY CO., Dept. 2
1311 W. MAIN, OKLAHOMA CITY 4, OKLA.

RUPTURED?

Get Relief This Proven Way

Why try to worry along with trusses that gouge your flesh — press heavily on hips and spine—enlarge opening — fail to hold rupture? You need the Cluthe. No leg-straps or cutting belts. Automatic adjustable pad holds at real opening — follows every body movement with instant increased support in case of strain. Cannot slip whether at work or play. Light. Waterproof. Can be worn in bath. Send for amazing **FREE** book, "Advice To Ruptured," and details of liberal truthful 60-day trial offer. Also endorsements from grateful users in your neighborhood Write:

Cluthe Sons, Dept. 15, Bloomfield, New Jersey

I'll Send You This Handsome SAMPLE CASE-FREE

and Show You How to Make Up to $30.00 in a Day

Mail coupon for this Free Tailoring Sample Case packed with 150 beautiful, big-value suit and overcoat fabrics. Take orders from friends, fellow-workers, others, for fine quality, made-to-measure clothes. Pocket big cash profits in advance. Because wearing our suits and overcoats brings more orders, we make it easy for you to get your own clothes without 1c cost. No experience is needed. SATISFACTION GUARANTEED. SEND NO MONEY. Just fill out and mail coupon — today!

W. Z. GIBSON, INC., 500 South Throop Street
DEPT. Y-406 - CHICAGO 7, ILLINOIS

W. Z. GIBSON, INC., Dept. Y-406
500 S. Throop St., Chicago 7, Ill.

Dear Sir: I WANT A MADE-TO-MEASURE SUIT TO WEAR AND SHOW, without paying 1c for it. Rush details and Sample Kit of actual fabrics, ABSOLUTELY FREE.

NAME _____ AGE _____

ADDRESS _____

CITY _____ STATE _____

FOLKS OVER 40
Now Read Fine Print!

THIS LOOKS LIKE THIS

Just out! Amazing new kind of reading glasses let you read fine print. Once again you can enjoy the Bible, newspaper, do sewing and fancy work without eye-strain—hour after hour. If you do not wear glasses regularly, you will be thrilled with this newest invention. Throw away the old-fashioned magnifying glass, put on a pair of PRECISION EYE GLASSES, and enjoy restful reading like you never did before.

PRECISION EYE GLASSES

A Blessing for Elderly Folks

Lenses are scientifically ground and polished, then fitted into frames of pure amber zylonite. Truly they add to your looks. And for all reading purposes they're "tops". Complete satisfaction guaranteed. Best order a pair today.

SEND NO MONEY

Just mail name, address and age. On arrival pay postman only $4 plus C.O.D. postage. Wear them for 5 days, then, if you aren't more than satisfied return for money back. If you remit with order, we ship prepaid, same guarantee. Order a pair today.

PRECISION OPTICAL LABS.
Dept. 437-B Rochelle, Ill.

LAW . . .

STUDY AT HOME Legally trained men win higher positions and bigger success in business and public life. Greater opportunities now than ever before.

More Ability: More Prestige: More Money We guide you step by step. You can train at home during spare time. Degree of LL.B. We furnish all text material, including 14-volume Law Library. Low cost, easy terms. Get our valuable 48-page "Law Training for Leadership" and "Evidence" books FREE. Send NOW.
LASALLE EXTENSION UNIVERSITY, 417 So. Dearborn St.
A Correspondence Institution Dept. 359-L Chicago 5, Ill.

RUPTURED

BE *FREE* FROM TRUSS SLAVERY

NOW there is a new modern **Non-Surgical** treatment that permanently corrects rupture. These **Non-Surgical** treatments are so certain, that a Lifetime Certificate of Assurance is given. Write today for our New FREE Book that gives facts that may save you painful and expensive surgery, and tells **how non-surgically** you may again work, live, play and love and enjoy life in the manner you desire. There is no obligation.
Excelsior Hernia Clinic Dept. 2305 Excelsior Springs, Mo.

60 POWER TELESCOPE $3.98

VARIABLE EYEPIECE 20X—40X—60X BRASS BOUN

NEW! Three telescopes in one. 3 different magnifications. 20 power for ultra-bright images with 40 and 60 power for extra long range. Guaranteed to bring distant objects, people, sports events, ships, moon, stars, etc. 60 times as close.

Most powerful for anywhere near the money. 5 Sections Closes to 1 ft. long. Contains 4 ground and polished lenses. Also used as a powerful compound microscope. Directions included. Mass production enables us to offer this instrument at amazing price of $3.98 complete Money back guarantee We pay postage Get yours NOW

CRITERION CO 331 Church St.
Dept. EAB 14 Hartford 1, Conn.

BORROW by MAIL!
$50 to $600 COMPLETELY CONFIDENTIAL!

It's fast! It's entirely private! Yes, regardless of where you live, if you are steadily employed you can get a quick cash loan from Postal Finance Company **entirely by mail.** No Agents will call on you. **No endorsers** required. Repay in small monthly payments to fit your income. Your employer, relatives, tradespeople and friends will not know you are applying for a loan. **RUSH COUPON** for information and Money Request Form sent to you **free** in plain envelope. No obligation. Act today.

POSTAL FINANCE CO., Dept. 104E
200 Keeline Bldg., Omaha, Nebraska
Please rush FREE information and Money Request Form.

NAME_____
ADDRESS_____
TOWN_____ STATE_____
OCCUPATION_____
AGE_____ AMOUNT YOU WANT TO BORROW $_____

Great Northern Railway

At Hillyard in Spokane, Wash., is Great Northern's largest diesel shop.

The new Hillyard diesel shop rose almost literally from dust of the steam-locomotive shop erected there in 1912. From this shop came GN's famous R-1 and R-2 Mallets, the first locomotives built west of the Mississippi and at that time the world's largest steam engines.

Replacing the old steam-locomotive pits are four depressed tracks of 155-pound rail, carried above floor level on pedestals and served by raised concrete and steel platforms, facilitating work at three levels. Another three tracks lead to a 16-foot pit where a 100-ton drop table permits the replacement of diesel-locomotive tracks in a matter of two hours or less. The GN is now completely dieselized west of Minot, N. D. •

GREAT NORTHERN has placed three historic cars on permanent display on a special track near the railway's shops at St. Cloud, Minn. These are a passenger coach, a passenger-baggage combine, and a boxcar, all bearing the name *St. Paul & Pacific Railroad,* the Big G's earliest predecessor. Last year the road put its first locomotive, the *William Crooks,* on permanent display in St. Louis Union Depot.

Another steam engine to become a museum piece is old No. 2, a wood-burner built by Baldwin in 1913. The 2-spot was used to haul lumber and crates in the Bradenton-Samoset area of Florida and, for a time, served the Seaboard Railway as a switcher. W. A. Stansfield, Box 712, Sanford, Fla., who sent us this news, says the oldtimer was bought from a construction company for $900, raised by public donations, and was literally dug out of the weeds and set up in the waterfront park at Bradenton. •

JACK DERAGON, author of "The Long Road," is, perhaps, Canada's foremost writer of railroad fiction. He

lives at 25 Lamarche St., Gardenvale, Quebec.

Jack Deragon

"My stepfather was a Canadian National lineman," says Jack, "and as a boy, when I wasn't in school I was likely to be hanging around the station, the roundhouse, or the cab of a way-freight ten-wheeler while she was doing her switching. In fact, I first learned to type on a beat-up old Underwood in the roadmaster's office at Jellicoe.

"Bob Ayre bought my first fiction story when he was editing the *Canadian National Magazine* and I was a kid of 16. Later, I tried to get a road job, but the Depression kept me from any kind of railroading except work as a news butcher and even a dish-washer on a dining-car that ran between Montreal and Toronto.

"I'm now working as a division manager for National Business Publications, Ltd., at Gardenvale. Main lines of CNR and CPR pass my office window.

"In the early thirties *Railroad Magazine* ran a jigsaw locomotive-picture contest. I spent a lot of time putting my entry together on two huge sheets of bristol board, and confidently mailed it three days before the contest closed. Two weeks later it came back from my local post office, badly mangled. *Railroad's* editors never even saw it. That really hurt." •

COMEUPPANCE. John Cameron Swayze tells the following story about J. Pierpont Morgan. It seems that one day the financier, wishing to return to New York from his Adirondack hunting camp by train, phoned the president of the New York Central that he wanted the 11:30 train for the city to stop at the backwoods station nearest his camp.

Then he set out for the depot. On arrival, he found the station agent, a grizzled individual, idly reading the paper. Annoyed at the lack of attention, Morgan asked if he had received orders to flag the 11:30. Not bothering to look up, the agent grunted, "Nope."

"You mean you're not going to flag it?" asked Morgan.

"Not without orders."

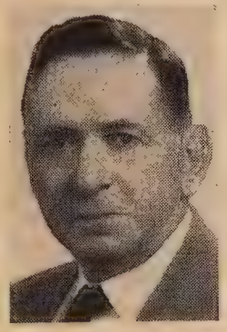
Morgan rushed to the baggage room, spied a red flag, and with it dashed to the station platform just as the train came in sight. He waved. The train ground to a stop, and Morgan, as he swung aboard, shouted at the station agent: "Wait till I get to New York. You'll hear about this!"

The agent grinned. "Don't get excited, Mr. Morgan. The 11:30 allus stops here." •

HAYWIRE MAC'S true tale, "Service Letters" (Feb. issue), evoked the following comments from Zeno T. Wilson, 417 Seventh St., Santa Rosa, Calif.:

"My long boomer trail crossed Mac's more than once. I began in 1901 at Hanson, Ky., on the Louisville & Nashville. The station agent, Jim Wilson (no relative), let me study telegraphy in the depot providing I would lead his cow to and from pasture every day for a year. This I did.

"Mac's getting by the examiners and company doctors reminds me of an incident that occurred on the Chicago & Alton at Bloomington, Ill., in 1906. I was traveling with a boomer 25 years my senior, Heady Loving. The division examiner gave each of us a form to take to the company medico uptown and get filled out. The doc asked Heady, 'Do you use intoxicating liquor?'



Zeno T. Wilson

"My pal said, 'No,' but he saw the doc write on the blank, 'I smell liquor on his breath.' Then the doc put it in an envelope, sealed it, and handed it to Heady. My friend stopped in at a barber shop on his way downtown. There he steamed open the envelope, erased the doc's remark, and wrote 'No' in its place. After that he resealed the envelope. The examiner did not notice the change. We were both hired and sent to tower jobs.

"Mac's reference to the mythical Indian Valley Line reminds me that I worked as agent and brass pounder on the very real Indian Valley Railroad at Paxton, Calif., the last two years of its existence, 1937 and '38. A copper mining company owned its 21 miles of serpentine track.

"Service letters and flagging (using fake names) and pie-books (meal coupons) were all part of boomer life. I never flagged in the sense that Mac means, but at Fresno, Calif., in 1929 I revisited a Santa Fe relay office where

HEARING BAD?

If so, you will be happy to know how we have improved the hearing and relieved those miserable head noises, caused by catarrh of the head, for thousands of people (many past 70) who have used our simple Elmo Palliative Home Treatment in the past 16 years. This may be the answer to your prayer. NOTHING TO WEAR. Here are SOME of the symptoms that may likely be causing your catarrhal deafness and head noises: Head feels stopped up from mucus. Dropping of mucus in throat. Hawking and spitting. Mucus in nose or throat every day. Hearing worse with a cold. Hear — but don't understand words. Hear better on clear days. Worse on rainy days. Head noises like crickets, bells, whistles, clicking, escaping steam or many other sounds. If your condition is caused by catarrh of the head, you, too, may likely enjoy such wonderful relief as many others have reported. WRITE TODAY FOR PROOF AND 30 DAY TRIAL OFFER.

THE ELMO COMPANY
DEPT. 5PF2 DAVENPORT, IOWA

LOCOMOTIVE PHOTOGRAPH CO.
Box 367, 22nd St. Sta., St. Petersburg, Florida
GET OUR CATALOG. Send 25c for our new catalog and FREE 3x8 photo of Penna. 6-8-6 No. 6200. Largest listing of builders' photos in the world. All important engines from 1865 to the present day listed, including foreign engines, in various sizes.

LOOK IMPORTANT FLASH YOUR BADGE

REPLICA of the REAL McCOY

These gleaming non-tarnish badges are finely crafted of massive metal. Will absolutely command respect wherever you go. Put the wise-guy in his place . . . impress your gal!

Your Choice
Special Officer — Deputy Sheriff
Private Detective — Constable
Sheriff — Deputy Constable
$2.00 each

FORD SALES Dept. A-9 P.O. Box 27, Cooper Sta., New York, N. Y.

SEND FOR Free Record

START SPEAKING FRENCH OR SPANISH ALMOST OVERNIGHT!

HERE'S the easiest way to learn FRENCH, SPANISH, Russian, German, Italian, Japanese or Brazilian. Listen to FREE 2-sided non-breakable record. Let your eyes follow words in FREE sample lesson. Almost at once you'll be chatting in a new language with a perfect accent! That's all you hear! No memorizing needed. Just listen—imitate! It's that easy! Offer may end soon. Rush 25¢ to help cover cost of special packaging, shipping. State language you want. We'll also send free information on full Cortina course. No obligation. CORTINA ACADEMY. Dept. 1183, 136 W. 52nd St., New York 19.

Kruger Pistol Bargain $3.00 post paid

.12 CALIBER SINGLE SHOT

.14 MG. POWDER CHARGE

BLUE-BLACK FINISH

Crafted after famous German Luger design. Not an air or CO^2 gun. This is a small bore gun that actually shoots .12 caliber lead bullets fired by light 14 mg. powder charge. Beautiful gun . . swell for target shooting. 4" steel barrel in knurled styrene stock. Overall length 8¾ inches. This amazingly low price due to ball and cap design. Direct factory-to-you-sales. Comes with 50 bullets. Send for extra bullets or available at stores. Money back if not satisfied. Limited quantity. Delivered free. Send $3 cash, check or money order to KRUGER CORP. KRUGER BUILDING, BOX 86 Q, ALHAMBRA, CALIFORNIA

Would You Like to Make $1,000 A MONTH?

That's what Stanley Hyman made selling the amazing new PRESTO Fire Extinguisher!

STANLEY HYMAN

AMAZING new kind of fire extinguisher. Tiny "Presto" (about size of a flashlight!) does job of bulky extinguishers that cost 4 times as much, are 8 times as heavy. Ends fires fast as 2 seconds. Fits in palm of hand. Never corrodes. *Guaranteed for 20 years!* Sells for only $3.98! Show it to civil defense workers, owners of homes, cars, boats, farms, etc., and to stores for resale—make good income. H. J. Kerr reports $20 a day. C. Kama, $1,000 a month. Write for FREE Sales Kit. No obligation. *(If you want a regular Presto to use as a demonstrator, send $2.50. Money back if you wish.)*

Science's New Midget Miracle—"PRESTO"

MERLITE INDUSTRIES, Dept. 1592, 114 East 32nd St., New York 16, N. Y. In Canada: Mopa Co., Ltd., 371 Dowd St., Montreal 1, P. Q.

SONGS NEEDED OR SONG POEMS

for Publication and Commercial Recording. Quick action! Celebrated expert offers you FREE copy of "SECRETS OF SONG SUCCESS." Honest deal designed to benefit all concerned. Mail Songs or Poems now.

REXRIGHT MUSIC CO., Dept. C
5617 Hollywood Blvd., Hollywood 28, Calif.

High School Course at Home **Many Finish in 2 Years**

Go as rapidly as your time and abilities permit. Course equivalent to resident school work—prepares for college entrance exams. Standard H.S. texts supplied. Diploma. Credit for H.S. subjects already completed. Single subjects if desired. High school education is very important for advancement in business and industry and socially. Don't be handicapped all your life. Be a High School graduate. Start your training now. Free Bulletin on request. No obligation.

AMERICAN SCHOOL, Dept. H339, Drexel at 58th, Chicago 37

Free Book on Arthritis and Rheumatism

HOW TO AVOID CRIPPLING DEFORMITIES

Explains why drugs and medicines give only temporary relief and fail to remove the causes; tells all about a specialized non-surgical, non-medical treatment which has proven successful for the past 35 years. Write for this 44-page FREE BOOK today

Ball Clinic, Dept. 16, Excelsior Springs, Mo.

AMAZING NEW POCKET SIZE RADIO

Really Works—Small as a Pack of Cigarettes!

NO TUBES, BATTERIES OR ELECTRIC "PLUG-INS." "TUNES IN" LOCAL STATIONS. Has new perma-crystal diode and SPEAKER PHONE—A marvelous real pocket size radio to take with you anywhere you go—GUARANTEED TO WORK and should last for years! SEND $1.00 (cash, m.o., ck) and pay postman $3.99 C.O.D. postage or send $4.99 for p.p. delivery. COMPLETE ready to play. By mail only from: Midway Co., Dept. PA-2, KEARNEY, NEBR.

IMPORT PAYS BIG

New World Trade Boom Offers Big Profit Opportunity to Ambitious Men and Women. Learn how to import thousands of products at low foreign prices for buyers in your locality at high U. S. prices—operate a worldwide mail-order Import-Export business from your home. **START WITHOUT CAPITAL** or previous experience. Training includes shipment to you of many sample imports from 'round the world. Opportunity world travel. Save on personal purchases of Clothes, Tools, Gems, Watches, Cameras, etc. **HERE'S PROOF**... an import from overseas **SENT AT OUR COST.** Mail this ad with 25¢ (coin) and we'll rush you this $2 Melson Automatic cigarette lighter to convince you of tremendous profits. Send for your lighter and full details showing how to learn World Trade secrets to put you on road to your own Profitable Home Business. (No lighter without this ad—only one to a person.) You can get details alone FREE, but the lighter is actual proof of import values. Either way, **WRITE TODAY! MELLINGER COMPANY, Dept. ET123, 1717 Westwood, Los Angeles 24, Calif.**

I had once worked. There I recognized a man named McArthur, but before I could speak he whispered, 'My name in this office is Turner.'

"On the never-to-be-forgotten morning of December 7, 1941, while I was holding down second trick for the Western Pacific at Wendover, Utah, a pie-book poker game was in progress in the trainmen's room of the depot-hotel. One boomer had won a large pile of $5 pie-books. Another rushed into the room, shouting:

" 'I just heard on the radio, the Japs have bombed hell out of Pearl Harbor.'

"We all knew what that meant. The boomers would have to go overseas, where Wendover pie-books weren't worth a dime a carload." •

COPIES of *Railroad Magazine* sure get around. So says E. Fabian, radio officer, *SS. President Tyler,* Pier 9, Jersey Terminal, N. J. "I have been reading *Railroad* for about 20 years and had been saving the copies for quite a while. Then my locker became so crowded that I had to get rid of them. When we stopped at Singapore, I gave the lot to the hogger on a crack express out of there to Penang on the Malaya Railroad. He said he'd pass the magazines around to his crew." •

PROBABLY the only place on earth that has a baby clinic on rails is New South Wales, Australia. Twenty-three years ago the NSW Government Railways designed, built, and equipped four railway cars to be used as baby clinics to bring medical aid to families living in isolated regions hundreds of miles from hospitals. •

SOUTHERN PACIFIC has installed a new radio station at Abernathy, near Cascade Summit in southern Oregon, capable of sending its signals deep into forested canyons at all times to communicate with trains. This service is used when storms cut off the trains from ordinary radio communications. It is a relay station where messages transmitted from Eugene, 60 miles away, are rebroadcast with stepped-up power. •

WHENEVER snow fell thickly last winter, the people living near the Buxton-Rochester branch of the British Railways were given passenger train service—but not at any other time. The BR made the unusual promise, "A train if it snows." You see, dwindling traffic had led to the withdrawal of passenger service, but the villagers complained that with a big snowfall they'd be cut off.

"If snow blocks roads," BR said, "we will run a passenger train." •

SANTA FE FIREMAN William L. Henry, 1812 W. Fifth St., Los Angeles 57, Calif., writes: "I enjoyed very much Lucius Beebe's article on the V&T, even though he goes overboard in his use of language which, on occasion, calls for a look-see in the dictionary. Few of us rank-and-file railroaders have college degrees." •

$64 QUESTION comes from Keith Pratt, general merchant, Bloomfield Station, Prince Edward Island, Canada: "What are the railroads doing to compete with highway transport? I ship a lot of Irish moss to Maine and other American places. It takes a carload of moss from five to ten days to go to either Rockland or Portland by rail, but I can drive a truck to either point in 24 hours." •

WILLIAM M. RITTASE, 1600 Chancellor St., Philadelphia 3, Pa., who supplied eight photos for our current issue, was raised in a Maryland village miles from the nearest railroad, the Western Maryland. The distant wail of steam locomotive whistles was music to his ears.

"Sometimes, at night," he recalls, "we boys would walk the miles to the railroad, sit on the bank, and watch and listen for the one nightly freight to go by. I can never forget the thrill I would feel when the headlight of the puffing freight engine rounded a curve. To us it was the most wonderful thing in the world. It meant travel and adventure.

"At age fourteen, after reading a book by Jack London which told of his experience in hitch-hopping freights, three of us boys ran away from home and stole rides on freights. The fact that London rode free was very important to us. We would wait for trains on the up-grade. The first time I unloaded, I must have turned three complete somersaults, but was unhurt except for bruises and cuts. Newspapers gave us columns of unexpected publicity; a railroad bull nabbed us, and Dad whipped me with a hickory stick.

"Years later, I took up photography. Some of my railroad pictures were published in Sunday rotogravure sections and shown in international salons. Soon I was getting assignments from big

Eastern roads and the Association of American Railroads. Some assignments took weeks; I was furnished a private railroad car to travel and live in. One night, laying abed after showering in a tile bathroom and eating a steak dinner in the car, I thought of Jack London. If only he had been a railroad camera man, how much easier his life would have been and he still could have traveled free. But finally the diesel and the anti-smoke laws took much of the kick out of my railroad photography." •

1881 WAS THE YEAR of a now-forgotten fast run. We get the facts from T. F. Babcock, 6285 Oliver Rd., Paradise, Calif., who learned them from his father, the late Allen H. Babcock, for years Southern Pacific electrical engineer.

"My father was spending the summer at Blue Canyon, on the Sacramento Division at the western slope of the Sierra Nevadas. The railroad was then called the Central Pacific and my father was 16. Blue Canyon stood at the western end of about 40 miles of snowsheds that made winter operation possible.

"Because the sheds were wooden and because all CP locomotives burned wood, there was a fire hazard. For that reason fire trains were located at several key points. Each consisted of an engine and about five tank cars constantly filled with water. Each engine was kept under steam, ready to roll on short notice, and crews were subject to call at any time.

"Another fire hazard was the large wood piles maintained at many points along the line, from which the road engines were refueled. One fire train stood at Blue Canyon. A wood pile was located down the mountain at Colfax.

"Like any normal boy, my father made friends with all the crew men at Blue Canyon, including those on the fire train. On July 31, 1881, the Colfax wood pile burst into flames and the Blue Canyon fire train was sent to fight it. I have a copy of the order for that run, No. 23, dated at Sacramento and signed 'JBW.' It reads:

C and E Eng. 210. Engine 210 will run extra Blue Canyon to Colfax wood pile and has right of track over all trains.

"The word *will* is no longer used in such orders. My father told me that when the call came in, he was the first one on the fire-train engine, but when he got off at Colfax he'd had all the fast ride he wanted. The distance from Blue Canyon to Colfax was 24 miles, all of it down grade, with crooked tracks and sharp curves.

"The original line, as built by the CP, ran around what was called Cape Horn, a few miles above Colfax, and around a bluff many feet above the swift-flowing American River. This part of the route has since been relocated, and the mileage now is probably less than it was.

"They made the 24 miles in 28 minutes. When you consider that the line had been completed just 12 years before, and the rail was probably not over 50- or 60-pound steel, the ties few and far between, and the ballast any old thing that came handy you will agree it was really fast time. I doubt that now even the *City of San Francisco,* running over some of the heaviest steel and finest track in the world, comes anywhere near it." •

INCORRECT "CORRECTIONS." Sometimes we print a letter from a reader contradicting a certain published item, only to learn later on that the original item was right. A case in point is a letter (Jan., page 66) saying that C. B. Gordon erred in stating that a Masonic lodge had acquired the old Virginia & Truckee depot at Carson City. Now Mr. Gordon sends us a printed *Grand Lodge Bulletin* confirming his previous letter!

This sort of thing happens so often that we hesitate to publish any kind of retraction. We hope that hereafter readers who challenge printed statements will submit proof.

Rev. K. J. Morgan, 1328 N. 31st St., Birmingham, Ala., caught an error in our January issue, page 67: British locomotive *Duke of Gloucester* is 71000, not YI-000. (Error was due to difficulty in reading a correspondent's handwriting.) •

PEN PALS are entitled to free listing in *Railroad Hobby Club.* Just tell us your main railroad interest and whether you want to correspond with railroaders or fans and where. •

THE CHANCE-TAKER. This grim warning from a 1917 issue of the *NC&StL Employees Magazine* is worth reprinting:

There was a wise old trainman,
Expert at coupling cars;
He used his feet to push in place
The knuckles and drawbars.
He did it thus for many years
And thought it was great fun;
He had two feet to push them with—
But now has only one. •

OWN YOUR OWN BUSINESS

Free folder tells how! Build and operate this profitable roadside stand—seasonal or year 'round. Mail coupon now.

RICHardson ROOT BEER Rich in flavor

RICHardson Corporation
Dept. AD-3, P.O. Box 790, Rochester 3, N.Y.
Please send me FREE folder on your tested, franchised refreshment stand.
Name.....
Address.....
Place.....

LAW MEN AND WOMEN STUDY AT HOME for Business Success and LARGER PERSONAL EARNINGS. 44 years expert instruction—over 114,000 students enrolled. LL.B. Degree awarded. All text materials furnished. Easy payment plan. Send for FREE BOOK.

AMERICAN EXTENSION SCHOOL OF LAW
Dept. J-1, 664 N. Michigan Ave., Chicago 11, Ill.

ACCOUNTANT BECOME AN EXPERT

Executive Accountants and C. P. A's earn $4,000 to $10,000 a year. Thousands of firms need them. We train you thoroly at home in spare time for C. P. A's examinations or executive accounting positions. Previous experience unnecessary. Personal training under supervision of staff of C. P. A's. Placement counsel and help. Write for free book, "Accountancy, the Profession That Pays."

LASALLE Extension University, 417 So. Dearborn St.
A Correspondence Institution Dept. 359-H Chicago 5, Ill.

EYE GLASSES by MAIL As low as $1.95

WRITE for FREE CATALOG with 14 LENS SAMPLE CARD
Thousands of Customers
Est. 1939

QUALITY READING-MAGNIFYING OR BIFOCAL GLASSES FOR FAR AND NEAR
ADVANCE SPECTACLE COMPANY, Inc.
537 S. Dearborn St., Dept. ADV-2 Chicago 5, Illinois

FREE FOR ASTHMA

If you suffer with attacks of Asthma and choke and gasp for breath, if restful sleep is difficult because of the struggle to breathe, don't fail to send at once to the Frontier Asthma Company for a FREE trial of the FRONTIER ASTHMA MEDICINE, a preparation for temporary symptomatic relief of paroxysms of Bronchial Asthma. No matter where you live or whether you have faith in any medicine under the sun, send today for this free trial. It will cost you nothing. FRONTIER ASTHMA CO. 784-W FRONTIER BLDG. 462 NIAGARA ST. BUFFALO 1, N. Y.

RID STOMACH & BOWEL OF BLOAT & GAS

With Guaranteed Double-Action Remedy

Doctors agree, to rid both your stomach and intestines of bloat and gas use a DOUBLE ACTION remedy. That is why new Magay Gold and White Tablets give results. A Gold Tablet BEFORE meals, a White Tablet AFTER meals, and you're on easy street. You eat what you like, you like what you eat. Goodbye gas, bloat and other symptoms of gastric hyperacidity.

Nothing like them! Contain 9 medically proved ingredients. Fast, safe, gentle. No dope. Anti-constipating! A triumph of science, awarded Seal of Approval by America's pioneer health magazine.

Settle your stomach worry right now. Magay works as stated or **Money Back.** Millions sold at $3. **Special introductory offer! Clip only $2.00 to ad for generous 30 tablet trial!** Why suffer? You have nothing to lose but gas-bloat. Write now to Magay Corp., Box 74, Bayside 60, New York. (75-D)

IDENTIFY PERSONAL PROPERTY

ONLY 75¢

Alice C. Hunter
16 PARKWAY TERR...
PITTSBURGH, PENNSYL...

ONE LINE

SMITH'S *Personal* POCKET STAMP

SIZE & STYLE OF TYPE USED

PRINTS UP TO 3 LINES

This compact, smartly styled stamp comes complete with ink pad. Beautiful Black Plastic Case fits pocket or purse.

- Smith's Personal Pocket Stamp insures safe return of mail or parcels.
- Personal identification of clothing.
- Distinctive personalization of letterheads, billheads, cards, books, photographs, music or models.

No. 2A Two Line Name and City ..... .85
No. 3A Three Line Name, Street, City 1.00
No C.O.D.'s. Send Money Order or Check Order Today

MAURICE C. SMITH CO., INC.
DEPT. PF 52 PINE ST., PROVIDENCE, R. I.

HYPNOTISM

Be Popular Amaze Entertain

Learn to apply Hypnotism and Autosuggestion in short time by training at home, with GUARANTEED RESULTS—DON'T DELAY. Write to America's oldest, most famous Hypnotic school for free information—now—today. Sent in plain wrapper.

SCHOOL OF APPLIED HYPNOLOGY
Dept. 574, 120 Central Park South, New York 19, N. Y.

OWN a BUSINESS *without* INVESTMENT

There's big money in your community taking easy orders from garages, service stations, lumber yards for Work Uniforms that advertise! Easy sales, big profits. Repeat business insures future. Represent finest, largest line in the field. Show huge selection of styles, embroidery fabrics, including miracle "wash and wear" Dacron, Orlon, etc. Everything you need to get started sent FREE.

TOPPS, Dept. 731, Rochester, Ind.

WALK ON CLOUDS!

Take your feet off your mind! These soft metatarsal pads make standing and walking a pleasure. Relieves metatarsal pain at once. Slip them into your shoes. Keeps pressure off the ball of the foot. Cushions the arch. Of soft, cool foam rubber and plastic. Adjust to form fit the foot. Specify for man or woman.

SPENCER GIFTS, Inc.
226 Spencer Building,
Atlantic City, N. J.

$1 per pair ppd.

RUPTURED

FOR SECURITY & COMFORT WEAR A DOBBS TRUSS
NO BELTS! NO BULBS! NO STRAPS!

Throw away that old fashioned harness forever. Get the amazing Dobbs Truss factory direct & save. NO BELTS, NO BULBS, NO STRAPS. Scientifically fitted. Holds like the hand. Can be worn while bathing. Does not strut the rupture. MEN, WOMEN, CHILDREN, doctors, lawyers, laborers work again, play again. You owe it to yourself to get full information TODAY.

REGULARLY $25
NOW Limited Time Only **9.95**

SEND FOR FREE LITERATURE
Dobbs Truss Co. Dept. PP-1
756 S. Broadway, Los Angeles, Calif.

WOODWORKING

LEARN The Easy Way!

Low Cost Home Craft Courses Now Available

Make money. Become a skilled woodworker. Interstate's new woodworking course tells and shows how to turn out hundreds of professionally constructed and finished wood projects with hand and power tools. Twenty-two profusely illustrated manuals. Over 1,000 pages. Over 75 projects. Written by expert instructors. The *only* complete course available today! Get full information without obligation... today.

HOW TO BE A SKILLED WOOD WORKER

WRITE FOR FREE BOOKLET

INTERSTATE TRAINING SERVICE
SCHOOL OF WOODWORKING
DEPT. F77C, PORTLAND 13, OREGON

RAILROAD HOBBY CLUB

Joseph M. Williams, Box 268, Saco, Maine

Jersey Central engine 837 westbound from Westfield, N. J., in 1936.

STEAM POWER

THOUGH STEAM may be vanishing in the United States, north of the border in Canada the billowing smoke and thundering drivers can still be seen in action.

"The Canadian Pacific Railway," for instance, writes William H. Coo, Red Deer, Alberta, "though it has 542 Diesel units in operation or on order, still operates nearly 1600 steam engines, a good portion of which see regular service. In fact, one may see CPR steam

power in operation anywhere on the system with the following exceptions: Revelstoke to Calgary, Lethbridge to Hope along the Kettle Valley, Fort William to Chapleau-Cartier, Sutton to Wells River, and the Esquimault & Nanaimo Railway (Vancouver Island).

"The motive power is kept in excellent condition, and runs the gamut from seventy-one-year-old 4-4-0's between Norton and Chipman, New Brunswick, to six-year-old 2-10-4's between Calgary and Swift Current."

Additions and corrections to our steam power list keep coming in.

The Greater Winnipeg Water District RR., St. Boniface, now all diesel.

Consolidated Paper & Power Co., Ontonagon, Mich., has shut down, and the engine is dead.

The Brookhaven & Northwestern exists only on paper, will run near Ponchataula, La.

The Raritan River, South Amboy, N. J., went all diesel Nov. 25, 1954.

The Louisville & Hadley (not Wadley) and the Hadley Southern, Hadley, Ga., run mixed trains.

Marinette, Tomahawk & Western's No. 19 is a 2-6-0, not a 2-6-2. The company has three engines, only one of which is used at a time.

Steam has vanished from the end of the Milwaukee's line, which is not Ontonagon but Channing, Mich.

This month's list was compiled from reports from Tommy Lawson, Birmingham, Ala.; Charles K. Willhoft, Milwaukee, Wisc.; Lawrence Green, North Plainfield, N. J.; E. Macdougall Palmer, Grand Junction, Col.; Reginald E. Button, Hamilton, Ont.; Jim Edmonston, Pittsburgh, Pa.; Kenneth H. Kerr, Columbus, Ga.; J. F. Monhoff, Altameda, Calif.; John Locke, Hackensack, N. J.; Ted Cherry, Buffalo, N. Y.; R. J. Dunnigan, Dayton, Ohio; Daniel A. Foley, Amherts, Mass.; Stanley A. Groman, Sandy Creek, N. Y.; Robert Chamberlain, Seattle, Wash.; R. R. Shade, Jr., Columbia Station, Ohio; and Lawrence W. Sagle, Public Relations Department of the Baltimore & Ohio, who lists B&O steamers, as of Nov. 1, 1954.

Alabama Central—Jasper, Ala.—4-6-0.

Atchison, Topeka & Santa Fe—Kansas City, Emporia, Kans.—dead engines.

Atlantic Coast Line—Fitzgerald, Ga.

Atmore State Prison—10 miles north of Atmore, Ala.—Ex-Frisco 0-4-0.

Baltimore & Ohio. Cumberland Division—P-1-d (Pacific)—Cumberland, Md., to Sand Patch, Pa., 2;—T-3 (Mountain)—Cumberland, Md., to Sand Patch, Pa., 1;—Q-4b (Mikado)—Shop yard switcher, Cumberland, 1.

Monongah Division—Q3, Q4 (Mikado—Grafton Pool, 15; Grafton-Cowen, 11; Grafton-Gassaway, 10; Fairmont Pool, 14; Clarksburg Pool, 1; Tioga Branch, 3;—P-1 (Pacific)—Grafton Pool, 6; Grafton-Richwood, 2; Grafton-Wheeling, 2.

Wheeling Division—Q-3 (Mikado)—Benwood and Parkersburg, 2; Parkersburg and Kenova, 2; Local Service-Lorain, 1; Holloway and Cleveland, 2; Holloway Yard, 2; Local-Parkersburg and Brooklyn Jct., 2;—Q-4 (Mikado)—Benwood and Clarksburg, 2; Benwood and Fairmont, 2; Benwood and Grafton, 2; Benwood and Glovers Gap, 1; Holloway Mine Runs, 3; Benwood Work Train, 3;—P-7 (Pacific)—Benwood Protect Service, 1;—S-1 (Santa Fe)—Holloway and Willard, 5; Holloway and Lorain, 2;—EM-1 (Mallet)—Lorain and Holloway, 5; Lorain and New Castle, 5.

Pittsburgh Division—Q-3 (Mikado)—Butler and New Castle, 1;—Q-4 (Mikado)—Glenwood and Connellsville, 1; Yard service, Glenwood, 1;—Q-4-a (Mikado)—Connellsville and Cumberland, 1;—Q-4-b (Mikado)—Connellsville and Johnstown,1;—P-1-d (Pacific)—Pittsburgh and Wheeling, 1; Connelsville and Pittsburgh, 1;—P-5-a (Pacific)—Pittsburgh and Butler, 1;—S-1 (Santa Fe)—Connelsville and Cumberland, 1; New Castle and Connellsville, 3; Hyndman and Sand Patch, 5; Helper service out of Glenwood, 1;—S-1-a (Santa Fe)—Connellsville and New Castle, 1; New Castle and Glenwood, 1; helper service out of Glenwood, 1;—T-3-b (Mountain)—Cumberland and Sand Patch, 1;—EM-1 (Mallet)—Connellsville and Cumberland, 2; Connellsville and Johnstown, 1.

Buffalo Division—Q-3 (Mikado)—Butler and New Castle, 2;—Q-4, Q-4b (Mikado)—Riker and Clearfield, mine line service on Indiana and Wharton Subdivisions; East Salamanca and Buffalo, at times to Rochester, Emergency passenger service to Riker, 4;—P-5-a (Pacific)—Pittsburgh and Buffalo (maintained at Riker), 2.

Akron Division—Q-4 (Mikado)—New Castle Jct. and Cleveland, 3; Akron Jct. and Newton Falls, 1; Akron Jct. and Canton, 1; Akron Jct. and Willard, 1; Painesville and De Forest Jct., 2;—S-1 (Santa Fe)—New Castle Jct., 1;—T-3, T-4 (Mountain)—New Castle Jct. and Willard, 5;—EM-1 (Mallet)—New Castle Jct. and Painesville, 8.

Chicago Division—Q-4-b—Local freight—Willard, Garrett, Chicago, Toledo, Lima, 5;—P-7-e (Pacific)—Passenger—Willard and Chicago, 2;—T-3, T-3b, T-3c (Mountain)—Fast Freight—Willard, Garrett, Chicago, Toledo, Lima, 12;—T-3-a (Mountain)—Fast Freight—Willard, Garrett, Chicago, 1;—T-3-d (Mountain)—Fast Freight—Willard, Garrett, Chicago, Toledo, 2;—T-4 (Mountain)—Freight—Willard, Toledo, Lima, 3;—S-1, S-1-a (Santa Fe)—Willard Yard, 5.

Newark Division—Q-3 (Mikado)—Local Freight—Newark and Willard, 2; Sandusky Yard, 1; Local Freight—Sandusky and Willard, 1;—Q-4 (Mikado)—Local Freight—Newark and Benwood, 2; Mine Run—Cambridge and Cumberland, 1; Zanesville and Philo, 1; Columbus Helper Service, 1;—P-7 (Pacific)—Benwood and Louisville, 2;—P-6 (Pacific)—Benwood and Willard, 1.

Ohio Division—Q-3 (Mikado)—Portsmouth Yard, 1; Wellston and Portsmouth, 2; Wellston and Parkersburg, 1; Cincinnati and Chillicothe, 1.

St. Louis Division—Q-3 (Mikado)—North Vernon Yard, 2; Mitchell Yard, 1; Washington, Ind., Yard, 1; Vincennes Yard, 1; Lawrenceville Yard, 1; Flora Yard, 1; Cone and Flora, 1; Flora and Shattuc, 1; Flora and Washington, 1; Washington and North Vernon, 2; North Vernon and Stockyards, 1; North Vernon and Youngstown, 1;—P-5 (Pacific)—Cone and Washington, 2; Washington and Cincinnati, 2; North Vernon and Louisville, 2;—P-7 (Pacific)—Cincinnati and Louisville, 2.

Toledo Division—Q-4 (Mikado)—Toledo and Lima, 4; Dayton and Chillicothe, 2; Hamilton and Midland City, 2; Toledo Yard, 3;—P-7 (Pacific)—Detroit and Louisville, 4; Detroit and Cincinnati, 4; Toledo and Cincinnati, 3;—T-3 (Mountain)—Toledo and Willard, 2; Lima and Willard, 1; Lima and Garrett, 1.

Bay Terminal—Cleveland, Ohio—0-6-0, ex-U.S. Army.

Berlin Mills Railway—Berlin, N. H.—2-6-2 stored.

Boston & Maine—Boston, Mass.—4-6-2's, 2-6-0's, 2-8-0 in commuter service; Billerica, Boston, Mass.—4-4-0, stored; Mechanicsville, N. Y.—2-8-4, stored.

Canadian National—Toronto, Hamilton, Ont.—0-6-0, 0-8-0, 0-8-2, 2-6-0, 2-8-0, 2-10-2, 4-6-0, 4-6-2, 4-6-4, 4-8-2, 4-8-4; Buffalo, N. Y.—0-6-0, 0-8-0.

Canadian Pacific—Toronto, Hamilton, Ont.—0-6-0, 2-8-0, 2-8-2, 4-4-4, 4-6-0, 4-6-2, 4-6-4, 4-8-4; Chipman, N. B.—4-4-0's; western Canada—2-10-4's.

C. D. Johnson Lumber Co.—Siletz, Ore.—2-6-2T's.

Central of Georgia—Columbus, Ga.—dead engine.

Central Vermont—2-8-0's in service everywhere; Brattleboro, Montpelier, St. Albans, Vt.—0-8-0's; White River Jct., Vt., Montreal, Que.—4-8-2's.

Chesapeake & Ohio—Buffalo, N. Y.—2-8-4 on display.

Chicago, Burlington & Quincy—Lincoln, Nebr.—4-8-2's, 4-8-4's, 0-6-0, 4-6-0's, dead.

Cleveland, Cincinnati, Chicago & St. Louis—most points; Collinwood, Ohio—many stored; Berea, Ohio—4-8-2, 4-8-4, 2-8-2; Toledo, Ohio—2-8-2, 0-8-0, and others stored and active.

Coos Bay Lumber Co.—Powers, Ore.—2-8-2T's, 2-8-2.

MEN 17-45 WANTED!

TO TRAIN FOR TELEVISION

One of America's Foremost Television Training centers is seeking men who would like to prepare for a good technical job or profitable business of their own in the fast-growing, big opportunity field of Television, Radio and Electronics. Technically inclined men 17 to 45 preferred. You may prepare to enter this billion dollar industry in the privacy of your own home in your spare time. Wonderfully effective method. Get full facts, without obligation. Mail a postal card, saying: "Tell me about Television." ACT TODAY—DON'T DELAY!— Dept. No. AG3L

DEVRY TECHNICAL INSTITUTE
4141 Belmont Avenue, Chicago 41, Illinois

POEMS WANTED
For Musical Setting

Mother, Home, Love, Sacred, Patriotic, Comic or any subject. Don't delay—Send us your Original Poem at once—for immediate consideration and FREE Rhyming Dictionary.

RICHARD BROTHERS
33 WOODS BUILDING — CHICAGO 1, ILL.

Want GOOD LUCK?

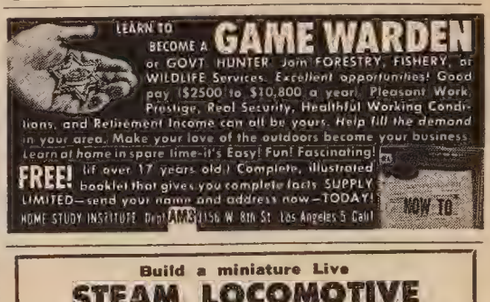
Love, wealth, happiness may be yours. Carry the alleged Lucky Talisman of the Orient. Try this amazing charm for one week. Satisfaction guaranteed or money refunded. Send only $1.00 in cash or money order, we pay postage. ORDER TODAY!

DEL MONTE
21-72 21st St., Suite 39-Z, Long Island City 5, N. Y.

IMPORTANT NOTICE TO SUBSCRIBERS

If you are going to move, please advise us at least 6 weeks in advance, giving the old address as well as the new with postal-zone number if any. Please enclose, if possible, the address stencil imprint from the last issue received.

POPULAR PUBLICATIONS INC.
Subscription Department
205 E. 42nd St., New York 17, N. Y.


LEARN TO
BECOME A GAME WARDEN
or GOVT. HUNTER. Join FORESTRY, FISHERY, or WILDLIFE Services. Excellent opportunities! Good pay $2500 to $10,800 a year. Pleasant Work. Prestige, Real Security. Healthful Working Conditions, and Retirement Income can all be yours. Help fill the demand in your area. Make your love of the outdoors become your business. Learn at home in spare time-it's Easy! Fun! Fascinating!
FREE! (if over 17 years old) Complete, illustrated booklet that gives you complete facts. SUPPLY LIMITED—send your name and address now—TODAY!
HOME STUDY INSTITUTE Dept. AMS 1556 W. 8th St. Los Angeles 5, Calif.
NOW TO

Build a miniature Live
STEAM LOCOMOTIVE
without a lathe or mill. We do the machine work, you BOLT IT TOGETHER. See our all cast firebox boiler, with it and a few hours work you have an excellent boiler. OUR NEW 1955 catalog lists EVERYTHING FOR LIVE STEAM LOCOMOTIVES in 1/4" (O-gauge), 1/2", 3/4", 1" and 1 1/2" scales. Price per copy 50c.
LITTLE ENGINES Box 15-C Lomita, Calif.

Exciting — Entertaining Playing Cards

52 Gorgeous gals in brilliant color. All posed differently to reveal breathtaking detail — Win or Lose. The boys will enjoy these cards. Send $2.00 to:

FORD SALES, Dept. A-6
P.O. Box 27, Cooper Sta. New York, N. Y.

Bean's

Free Catalog

Ready February 7

Fully illustrated. 104 pages, showing special fishing tackle, footwear, clothing and one hundred and twenty other leather and canvas specialties of our own manufacture.

L. L. Bean, Inc., 201 Main St., Freeport, Maine

Mfrs. Fishing and Camping Specialties

FREE! FAMOUS BLUE BOOK CATALOG

DICE • CARDS

Perfect Dice, Magic Dice, Magic Cards—READ THE BACKS — Inks, Daubs, Poker Chips, Gaming Layouts, Dice Boxes, Counter Games, Punchboards. WRITE FOR CATALOG TODAY.

K. C. CARD CO. 819 S. Wabash Ave., Chicago, Ill.

WE MATCH PANTS ToAnySuit!

Double the life of your coat and vest with correctly matched pants. 100,000 patterns. Every pair hand tailored to your measure. Our match sent FREE for your O. K. before pants are made. Fit guaranteed. Send piece of cloth or vest today.

SUPERIOR MATCH PANTS COMPANY
209 S. State St. Dept. 73 Chicago

FINISH HIGH SCHOOL AT HOME!

No classes to attend. Easy spare-time training covers big choice of subjects. Friendly instructors; standard texts. Full credit for previous schooling. Diploma awarded. Write now for FREE catalog!

WAYNE SCHOOL Catalog HCP-2
2527 Sheffield Ave., Chicago 14, Illinois

MAKE MONEY WITH MEN & WOMEN PLASTICS

Learn to make fast-selling Plastic Jewelry, Novelties, Signs, Lamps, Toys, Furniture, Gifts. Amazing new Plastic Home Craft Course for MEN and WOMEN tells and shows how to fabricate, cast, laminate, color, mold, internal carve, etc., in step-by-step words and pictures. Young and old master easily. Only ordinary household tools needed. All plastics and materials for 23 PROJECTS included in course. Course actually pays for itself! START YOUR OWN PLASTICS BUSINESS. Make popular plastics items for EXTRA INCOME! Write for FREE information Today.

FREE BOOKLET

INTERSTATE TRAINING SERVICE
DEPT. C-11-C PORTLAND 13, OREGON

ONLY $5.00 DOWN

Buys Beautiful LAKE HOMESITE

"Deep in the Heart of Texas"

Full Price $39.50 Send For Details FREE!

Liquidation Sale! While they last, choice homesites now available on Medina Lake—just 38 miles on paved highway from historic San Antonio, Texas. Electricity, telephone, schools, churches! Warm summer days and cool summer nights make this ideal for round-year living. Ideal spot for retirement. FULL PRICE only $39.50. Terms only $5.00 DOWN and balance over 7 months. Send for big colored brochure FREE. No obligation! Address Avalon Ranch Sales Co., Dept. 515, P.O. Box #2581, San Antonio, Texas.

Denver & Rio Grande Western—all narrow-gage lines 100% steam; Aspen Branch—steam daily—Salida, Colo.—steam in yard, both gages; Pueblo-Salida—two 4-6-6-4's.

Dunlop Rubber Co.—Buffalo, N. Y.—0-4-0T.

Duquesne Slag Products Co.—Pittsburgh, Pa.—0-6-0T, 0-6-0, 0-4-0's.

Eastern Gas & Fuel—Everett, Mass.—0-8-0's, 0-6-0's, incl. ex B&M and Portland Term. locos.

Frisco—Birmingham, Ala.—2-8-2 on exhibit; Winfield, Ala.—2-8-2.

Grand Trunk Western—Muskegon, Battle Creek, Mich.—4-6-2, 4-8-4, 4-8-2, 2-8-2, 0-8-0, 2-8-0.

Louisville & Nashville—Birmingham, Tarrant City, Ala.—mostly dead engines.

Maine Central—Waterville, Me.—4-6-2's, 2-8-2's, 2-8-0's, 0-6-0's, stored.

Midland of Manitoba—Winnipeg, Man.—0-6-0's.

Mobile Dock Co.—Mobile, Ala.—1 steamer.

Monsanto Chemical Co.—Everett, Mass.—0-4-0T.

New Haven—Readville, Mass.—2-8-2's, stored.

New York Central—Terre Haute, Ind.—2-8-2, 0-8-0, stored; Mattoon, Ill.; Collinwood, Ohio—4-6-4, 4-8-4, 4-8-2; Jackson, Mich.—2-8-2, 0-8-0, 0-6-0, mostly stored; Buffalo, N. Y.—0-8-0's, 2-8-0 stored at Gardenville hump yard; Cincinnati, Ohio (Terminal, Sharon and Riverside engine houses)—0-6-0, 0-8-0, 2-8-2, 4-8-2, 4-8-4; St. Thomas, Ont.—2-8-2's.

Nickel Plate—Huron, Bellevue, Conneaut, Ohio—2-8-2, 0-8-0, 2-8-2.

Pennsylvania—Pittsburgh, Pa. (North Side Yard) 4-6-2, 2-10-0, 2-8-2, 4-8-2, stored.

Pine Creek—Rte. 9, 4 miles north of Freehold, N. J.—narrow-gage outdoor museum operating Sat. & Sun.

Portland Terminal—Rigby, Me.—4-6-4, stored.

Rahway Valley—Kenilworth, N. J.—2-8-2's, 2-8-0's.

Rail City Museum—Sandy Creek, N. Y.—13 ex-Solvay Process Co. locos—Saddle tankers, 2-8-0, ex-Huntington & Broad Top Mountain No. 38.

Rock of Ages Co.—Graniteville, Vt.—0-6-2T's, 0-6-0's.

Rutland—Rutland, Vt.—4-8-2's stored, 4-6-2 for heating.

St. Regis Paper Co.—Mineral, Wash.—3 Heislers.

Simpson Logging Co.—Shelton, Wash.—Shay, four 2-8-2's.

Soo—North Fond Du Lac, Wisc.—Train No. 2 changes engines, 4-6-2.

Talbotton Railroad—Talbotton, Junction City, Ga.—Central of Ga. 2-6-0.

Union Pacific—Seattle, Wash. switcher working at roundhouse Sat.

Union Pacific—Topeka, Kans.—2-8-2's, 2-8-0's; Lawrence, Kans.—2-8-0 on Leavenworth Branch; Junction City, Kans.—2-8-0, 4-8-2's, 2-8-2's; Salina, Kans.—0-6-0, 2-8-0, 2-8-2, 4-8-4; Kansas City-Topeka, Topeka-Marysville, Topeka-Junction City, Junction City-Salina local freights—2-8-2's; Salina-Ellis local freight—2-10-2; Concordia and Planville Branches—2-8-0's; Beatrice, Nebr.—0-6-0; Lincoln, Nebr.—2-8-0.

United States Pipe & Foundry—Birmingham, Ala.—0-4-0, 0-6-0.

Valdosta Southern—Valdosta-Madison, Fla.—G&F 2-6-2.

Valley & Siletz—Hoskins, Ore.—2-8-2's, 2-6-2.

Wick-Wire Spencer Steel Co.—Palmer, Mass.—0-4-0T.

Woodward Coal & Iron—Birmingham, Ala.—2-6-2, 2-6-0's.

RAILROADIANA

ITEMS sent to this department are printed free, in good faith, but without guarantee. Write very plainly.

No entry longer than 28 words will be accepted—except those dealing with specific back numbers of this magazine.

Address *Railroad Magazine*, 205 E. 42nd Street, New York 17, N. Y.

Because of time needed to edit, print, and distribute, all material should reach us nine weeks before the magazine appears on the newsstands.

Use these abbreviations: *cond.*, condition; *ea.*, each; *env.*, envelope; *eqmt.*, equipment; *esp.*, especially; *n.g.*, narrow-gage; *negs.*, negatives; *p.c.*, postcard; *pref.*, preferably; *tr.*, train.

The term *tts.*, refers to public timetables, unless preceded by *emp.*, when it means employes' (operating) timetables.

(R) indicates desire to buy, swap or sell back issues of *Railroad Magazine*. (Specify condition of each copy.)

(*) indicates juicefan appeal.

SWITCH LIST

JIM ADY, Box 991, Las Vegas, Nev., will pay $25 and up ea. for orig. Las Vegas & Tonopah emp. tts., $10 and up for pub. tts., also wants Eureka Nevada, Carson & Colorado, Tonopah & Goldfield emp. tts.

(*) H. E. BENNETT, JR., 1804 N. Mount St., Baltimore 17, Md., wants pix Pennsy latest elec. locos, Balto. Trans, Birney cars, Pac. Elec. (MCL) buses, NYNH&H FCD, new Cleveland cars, Balto. Trans. system map prior '40.

(R) DOUG BRISTOW, 733 E. Brookline St., Winston-Salem, N. C., offers size 616 and 620 pix Sou., Vgn., N&W, W&S; *Railroad Magazines* and model mags., good cond; list 3c stamp.

(R) (*) BOB BROCK, Jr., 720 State St., Bowling Green, Ky., wants pix of Chautauqua Trac.; lists of juice, diesel or n.g. color slides or pix, also Sept. and Nov. '50 *Railroad Magazine*.

(*) JIM BUCKLEY, writing for Electric Ry. Historical Soc., 7625 W. Gregory St., Chicago 31, Ill., wants to hear from anyone who bought historical material of late Clarence Hesselbaum, Aurora, Ill., on the CA&DeK, W&S, R&I, J&S, and Fox Valley Trac.

JIM BURCHARD, Box 293, East Haven 12, Conn., wants pix Tonopah & Tidewater, Tonopah & Goldfield.

P. A. CARLETON, 71 Winans Ave., Newark 3, N. J., will buy good negs., p.c. size, of PRR, DL&W, JCL, B&O, Erie, B&M NYC, NYNH&H, Rdg., LV; send list.

(R) H. C. CARPENTER, 3543 Edwards Rd., Cincinnati 8, O., sells *Off. Guides*, emp. tts, maps, books, calendars, *Railroad Magazines* annual and trip passes (many short line) prior '20; old bill ladings; list for 3c stamp.

(R) D. M. CHRISTISEN, Box 122, Columbia, Mo., will buy on approval p.c. size negs. Milw., M&StL, Frisco steam power. Has 58 back issues *Railroad Magazine*, 56 *Trains*, emp. tts., sell or trade for other issues rr. mags, books, HO eqpt. List 10c.

RODGER DARLING, 1902 S. 17th Ave., Maywood, Ill., will sell tts. of 28 roads, '51-'54, like new, 5c ea., or trade for old Santa Fe tts.; send 3c stamp for details.

BENNETT DICKMANN, 109 N. Charles St., Edwardsville, Ill., will sell *Off. Guides*: Mar. '37, fair cond., $3.50; Jan. '41, good cond., $3.50; Sept. '40, good cond., $3.50; Dec. '46, good cond., $3.

Capt. ANTIETAM M. EL CANEY, 4704 Vineta Ave., La Canada, Calif., is selling his library of railroadiana, old Western travel guides, telegraphy and early books on telephone development. Send 3c stamp for info.

BILL ENO, Sheffield, Iowa, will buy emp. tts. of B&O Cumberland Div.; state price and cond.

WALT EVANS, 3213 Indiana Ave., Topeka, Kan., has quality 620 size negs. UP, ATSF steam to trade for steam negs., same size, any road.

TOM FRANCIS, 601 W. Forest Ave., Ypsilanti, Mich., wants NYC *Headlight* mag. Sept.-Feb. '54.

(R) BILL FRONCZEK, JR., 341 S. Winebiddle Ave., Pittsburgh 24, Pa., will buy June '49 *Railroad Magazine*, good cond.

DICK GANGER, 92 Roswell Ave., Buffalo 7, N. Y., will buy prints NYC 5346, 5354, 5355, 5357, 5359, 5462, 5464, 5472, 5473; Milw. 132, 6409, 6411, 6415; N de M 2702, 2706, 2709.

L. P. GILLUM, 519 Claremont Ave., West Chicago, Ill., will sell or swap emp. tts., *Off. Guides, Eqpt. Registers*, good cond. Write for list, stating wants.

E. L. GLAZE, 426 Riverside Rd., Baltimore 25, Md., wants pix, info., maps, emp. tts., etc., Cumberland Valley RR.

(R) WALT HARRIS, 45 W. Elm St., Stockton, Calif., sells issues *Railroad Magazine, Trains, Ry. Progress*, model mags.; list for 3c stamp.

RALPH HULL, 223 Enola Rd., Enola, Pa., will sell for best offer *Cornwall & Lebanon RR Book of Rules* '90; *Middle States Frt. Ass'n Reports*, '09-'10.

V. HURD, Box 250, Green River, Wyo., will sell *Off. Guides*, '54 Feb. thru May, July thru Dec., good cond, $2.50 ea. postpaid.

B. J. KERN, 1733 Huy Rd., Columbus 11, O., sells 8x10 carbuilder photos, '05-'28; list and sample 25c.

(R) TOM LEAR, 512 Cambridge Rd., Coshocton, O., will pay good price for *Railroad Magazine* Dec. '46, Feb. '47, unclipped.

BOB LE MASSENA, 1795 S. Sheridan Blvd., Denver 14, Colo., has 35 mm. kodachrome origs. of D&RGW n.g. locos, cars, trs., scenes for swap or sale; no list, send wants.

ELWIN LIQUE, 917 N. 3rd Ave., Wausau, Wis., will buy p.c. size negs. of famous pass. trs., time frts, pix of first *Hiawatha* Alco 4-4-2.

(*) GORDON LLOYD, 1124 Community Dr., La Grange Park, Ill., will sell Nov. '47 thru Oct. '48 *Trains*, $2.25 postpaid; also sells and trades 35 mm. elec. color slides.

JOHN LOCKE, 428 Prospect Ave., Hackensack, N. J., will buy or trade p.c. negs. all roads, esp. oldtimers; will sell p.c. prints of Erie, CNH, PRR, Rdg. steam locos.

(R) (*) AL LOHMANN, JR., 11A Reading Ter., Fair Lawn, N. J., will sell 400 trolley and interurban prints, size 116; best offer takes all; some back issues of *Railroad Magazine* and PRR Calendars. List for stamp.

(*) JOHN MACLEAN, 542 Cranbrooke Ave., Toronto 12, Ont., Canada, sells pix of U.S. and Canadian steam and elec. lines, size 116-616, 15c; p.c. size, 25c; 4x7, 35c; 6x10, 50c; lists and sample print 25c.

(*) JOS. McMAHON, 15 Adrian Ave., New York 63, N. Y., sells rr. and trolley pix, many pre-war; list for 3c stamp. *Off. Guides*, 1945-51, $1 ea.

(R) A. MEACHAM, 206 Dearborn Ave., Winnipeg 5, Man., Canada, will sell '41, '42, '43 *Railroad Magazines* $2 per year postpaid.

J. F. MONHOFF, 524 E. Marigold St., Altadena, Calif., sells pix SP, PE, WP, Feather River Ry., Arcata & Mad. Riv., McClaud Riv., Quincy, UP; list 3c stamp.

ED ODOM, 244 Grove St., Brooklyn 37, N. Y., buys PRR negs. size 116, 616, p.c.; offers 50c to 75c for ea. neg.; also trades PRR and other roads for negs. of PRR and LIRR.

REES PERRY, 51 William St., Tighes Hill, Newcastle, New South Wales, Australia, wants to hear from fans interested in railway pictorial matter and stamps showing railways.

(*) LARRY PHILLIPS, 271 Sherman Ave., Newark 5, N. J., buys color slides or pix of British and Australian trams, or trade pix of U.S. streetcars.

ERNIE PLANT, 6463 Chatham St., Box 40, Horseshoe Bay, B. C., sells size 116 pix, BCER, CPR, CNR, PGE, other Can. roads, 20 for $1.70; CPR, CNR, PGE, 116 negs., 35c ea.; emp. tts for sale, CP, CN, PGE, BCER; send 10c for info.

BOB SAMS, 2745 Bush Blvd., Birmingham 8, Ala., sells size 116 RR pix, 10c ea.; free lists.

(R) GEO. SELLERS, 6208 Shelborne St., Philadelphia 11, Pa., will sell copies *Railroad Magazine* and *Trains*, '45 to '48; send 3c stamp for info.

(*) A. R. SHADE, Jr., RFD Box 2, Columbus Station, O., will sell or trade steam pix and negs. NYC, CPR, CNR, B&O, etc., for other roads. List and sample photo 10c. No neg. list. State wants. Neg. sizes 120, 116, 9x12 CC.

(*) BRUCE C. SMITH, 121 N. Washington St., Platteville, Wis., wants color or black-and-white slides Milw. elec., speedrail LATL, LARy or PE or other elec. lines or n.g. lines; wants model roundhouse 060.

(R) HAROLD SMITH, Rte. 2, Pittsfield, N. H., has about 100 issues *Railroad Magazine* and *Trains*, mostly since 1948, 25c ea. plus postage, or 20c per issue for lot, plus postage. Has few size 116-616 rr. pix, 10c ea. plus postage. List for 3c stamp.

F. C. SNYDER, 508 Smithson Ave., Lawrence Park, Erie 3, Pa., will sell '48 NYC loco data book, Heisler cats., bldrs color pix PRR T-1, Porter handbooks, misc. items; list for 3c stamp.

BOB SPARK, 15 St. Stephen's House, Westminster, London, S. W. 1, England, sells British and American magazines, books, literature, also British p.c. pix; list free.

BILL STEPHENSON, 6019 S. 7th Ave., Phoenix 14, Ariz., has emp. tts, rulebooks to trade or sell; wants switch keys or card passes; list for 3c stamp.

(R) STAN STYLES, 19 W. 18th Ave., Vancouver 10, B. C., Canada, sells size 616 pix, negs., CPR, CNR, NP, BCER, others, enlarged scenics; 100 *Railroad Magazines* from '45 surplus pix, 5c ea.

M. W. SWANSICK, 3116 Quitman St., Denver 12, Colo., will sell 13 years *Trains*—complete for first bid over $27.

(*) PAUL THOLFSEN, 1370 E. 24th St., Brooklyn 10, N. Y., wants transit tokens, any city; will buy or trade PRR and NYNH&H elec. pix.

GRANVILLE THOMAS, 617 Mulberry St., Millville, N. J., will sell large PRR calendars '43 to '54 incl., $1 ea. plus postage; and *Popular Mechanics* '12 to '17 incl., *Technical World* '12 to '14, for best offer.

(R) RAY VECCHIE, Box 582, Kincaid, Ill., is selling entire collection of *Railroad Magazines*, books, emp. tts, etc.; send for list.

(R) (*) E. P. VERDONCK, 106 E. Archwood Ave., Akron 1, O., is selling few loco. and trolley negs., trade Sugar Crisp emblems, late *Railroad Magazines*.

JOHN WEBB, 473 Parkside Dr., Toronto 9, Ont., Canada, will buy copies of Beebe's *Highliners* and *High Iron*, '38 and '48 Pennsy calendars, A1 cond; O gage scale streamlined steam loco; good pix steam-powered streamliners, name trains.

(R) RAY WESTING, 6325 Hancock Ave., St. Louis 9, Mo., will sell '54 *Railroad Magazines*, new cond. $3.50; *Off. Guides*, Sept. '46, Oct. '46, June '47, good cond., $2.50 ea.; also Jan. '43 front cover missing $1.50; *Trains*, Sept., Oct., Nov., Dec. '54 new cond, 35c ea.; also empl. mags., rr. calendars.

(R) RALPH WHITE, RFD 1, Box 91, Haw River, N. C., has back numbers of *Railroad Magazine*, Oct., Nov., Nec. '32; all '33 exc. Apr., May and June; all '34 exc. Mar., Sept.; all '35 thru '40; all '41 but Nov.; all '42, '43 incl. 2 for Jan. '43, both dif.; all '44 but Jan.; all '45, '46 but Nov. '46; all '47 incl. 2 for Jan., both dif; all '48 thru '54.

M. C. YODER, 16570 Rosemont Rd., Detroit 19, Mich., sells large NYC calendars, '43 thru '54, new cond., $1.50 ea. postpaid, 10 for $12 postpaid; also few other calendars.

(*) WALT ZULLIG, 475 Oak Ave., Maywood, N. J., will take 8 mm. movies and 35 mm. color slides of NY area RRs and juice lines; write for info., stating interests.

MODEL TRADING POST

H. ASHLEY (*), 50 Saratoga Ave., Yonkers 5, N. Y., offers HO steeple cab without motor, $10; cars, $1; O scale caboose, extra detailing, tinplate operation, illum., nicely built, unused.

W. HENNING, 1113 Willow Ave., Hoboken, N. J., wants HO diesel fans to swap Hobbytown 1600 hp Alco switcher 8-wheel drive, test run only, for any Penn Line steam loco.

Dr. C. KOWAL, 1846 W. 20th St., Chicago 8, Ill., will sell AF mech. loco 13, tender and coach early '20 model, still runs, paint is orig., $18; also 4-wheel lithographed beer car O gage, made about '19 or '20, Bink Mfg. Co., $10.

EDNA LAWSON, 6436 N. Hamilton Ave., Chicago, Ill., will sell old-fashioned Ives 25 windup 4-4-0 eng. and 8-wheel tender, fine cond., for best offer over $45.

S. MAHOLY, 2300 W. 21st St., Chicago, Ill., offers set of Ives std.-gage; obse. 172, bag.-combine 170, parlor car 171; paint still fair, $15.

(*) RALPH RICHARDSON, Central College, McPherson, Kan., wants to hear from traction modelers.

D. S. RICHTER, 1659 Kains Ave., San Bruno, Calif., will buy AF or Lionel std.-gage loco, good cond.

FLAGSTOPS

TRAINS ILLUSTRATED, published by Ian Allan, Ltd., Craven House, Hampton Court, Surrey, England, is issued every month mostly for the benefit of the English railfan. Each issue contains historical and mechanical as well as the railfan type of article. Subscriptions are 18 shillings a year.

* * *

COINCIDENT with NMRA convention, LIRR fantrip is planned for April 23. Special train leaves Garden City, L. I., at 1 p. m. Inspection stops at Jamaica terminal and Morris Park shops, where roundhouse and turntable operate. Return trip on freight branch. Price, $2. Contact Andrew Sackerman, 77-44 Austin St., Forest Hills, N. Y.

* * *

BOSTON & ALBANY fantrip, $3.95, April 9, station and yard tours, Beeliner ride, Highland branch, sponsored by Railroad Enthusiasts, N. Eng. Div. Write H. F. Greene, 44 School St., Boston, Mass.

AMAZING "OLD WORLD DOPE" MAKES

FISH BITE EVERY DAY

Catch your limit every day. "Century-Old" Romany formula for all fresh and salt water fishermen. Worms or minnows—live or artificial bait, doped with GYPSY Fish Bait Oil throws off an irresistible odor which attracts fish like magic.

ORDER BY MAIL Supply so limited, not yet sold in stores. Tested, proven, satisfaction guaranteed. Only $1.00, 3 for $2.00. Send cash, check or money order. If C.O.D., charges extra. Order GYPSY Fish Bait Oil from:

FISHERMANS PRODUCTS CO. Dept. 437C
2832 Niazuma Ave. Birmingham, Alabama

Sensational Device Tests Eyes

SAVE up to $15.00 on Glasses!
Big news to the millions of Spectacle Wearers and Prospects. Means Freedom from Outrageous Prices. Sold on Money-back Guarantee.

MAKE BIG MONEY QUICK—FREE SAMPLE KIT!
Show it to friends and others. Let them use it Free and watch their amazement over this Self Testing system. Here is a great new opportunity in a tremendous new field of unlimited possibilities. Spare or full time. No experience needed. Write for FREE complete sample kit.

C. G. OPTICAL CO. Dept. A-270
20 E. Delaware Place Chicago 11, Illinois

LEG SUFFERERS

Why continue to suffer without attempting to do something? Write today for New Booklet—"THE LIEPE METHODS FOR HOME USE." It tells about Varicose Ulcers and Open Leg Sores. Liepe Methods used *while you walk*. More than 60 years of success. Praised and endorsed by multitudes.

FREE BOOKLET

LIEPE METHODS, 3250 N. Green Bay Ave., Dept. C-61 Milwaukee 12, Wisconsin

SEND FOR THIS FREE!

Make money. Know how to break and train horses. *Write today for this book FREE*, together with special offer of a course in Animal Breeding. If you are interested in Galting and Riding the saddle horse, check here ( ) *Do it today—now.*

BERRY SCHOOL OF HORSEMANSHIP
Dept. 843 Pleasant Hill, Ohio

Start As High As
$4,205.00 A YEAR

Prepare NOW For Next Examinations

MEN—WOMEN

Postoffice Clerks-Carriers
Railway Postal Clerks
Stenographers
Accountants
Immigrant Inspectors
Typists
Customs Inspectors
Many Other Early Jobs
Veterans Get Preference

MAIL COUPON TODAY SURE

COUPON

FRANKLIN INSTITUTE
(Not Government Controlled)
Dept. A-92
Rochester 4, N. Y.

Gentlemen: Rush to me, FREE of charge, list of U. S. Government big pay jobs. Send FREE 36-page book describing salaries, vacations, hours, work, etc. Tell me how to qualify for one of these jobs.

Name .....
Street .....
City ..... Age?.....

THIS COMPLETE, SIMPLE, PRACTICAL COURSE FOR SELF-INSTRUCTION WILL QUICKLY GIVE YOU *a complete mastery of* MATHEMATICS

ARITHMETIC for the PRACTICAL MAN
ALGEBRA for the PRACTICAL MAN
GEOMETRY for the PRACTICAL MAN
TRIGONOMETRY for the PRACTICAL MAN
The CALCULUS for the PRACTICAL MAN
J. E. THOMPSON
One of the Series MATHEMATICS FOR SELF STUDY
D. VAN NOSTRAND COMPANY, INC.

NEW EDITION
Revised for present-day needs. More useful, more practical than ever before!

5 VOLUMES
1,598 Pages
Illustrated

THE ESSENTIAL KNOWLEDGE FOR SO MANY OF TODAY'S
JOBS IN BUSINESS AND INDUSTRY

GET a better job in America's great industries, and prepare to seize your coming opportunities—learn mathematics. Mathematics is the basic requirement of all mechanical and scientific work, and of all business or industry based on science. Without this essential knowledge even the most capable man is left behind while others forge ahead to better jobs, bigger contracts, more money. You need mathematics to understand all technical work, to supervise operations, to improve, speed up and check on your work and the work of others. Such basic training is quickly recognized today and gladly paid for. It singles you out from the crowd and gives you an advantage whether it is a matter of a job, a promotion or a contract. Now you can learn mathematics—the foundation of all technical work—by an easy, inexpensive and time-saving method. A very simple and extremely interesting course in book form has been prepared for you by an expert who has devoted a life-time to teaching practical men the fundamentals of this important subject. Every minute you spend on this course will pay you big dividends.

MATHEMATICS For Self Study

By J. E. Thompson, B.S. in E.E., A.M., Dept. of Mathematics, Pratt Institute

A COMPLETE COURSE AND REFERENCE LIBRARY

You start right from the beginning with a review of arithmetic that gives you all special short cuts and trick problems that save countless hours of your time. Then, step by step, you go into higher mathematics and learn how simple it all can be when an expert explains it to you.

Get This Training in Only Ten Minutes a Day

You can gain all the benefits of a mathematical training in a period of months, if you will devote ten minutes' time each day to these easy lessons. As your training in mathematics progresses, you will begin to see evidences of a new impetus toward successful work in your business, your profession, or your industrial activity.

In this new edition these are but a few of the hundreds of subjects simplified and explained in this complete self-study course in mathematics.

An Expert Gives You His Simplified Methods

Mr. Thompson, the author of these books, is not an ordinary teacher of mathematics. He has had many years' experience in giving students the kind of mathematical training they need in practical work.

He presents each practical method and problem in the clearest and simplest way. He gets right down to the kind of information that you need in your daily work.

ARITHMETIC: Starting with a quick review of principles, this book gives you the special calculation methods used in business and industry that are rarely given in ordinary arithmetic books, and which every practical man should know.

Above all else this volume shows you how to attain speed and accuracy with fractions and decimals, ratio and proportion, powers and roots, etc. Fundamentals in all computations in engineering—in both plant and field—and the essential methods for rapid calculation, such as is needed in setting lathes, etc., are made clear and simple. Important business subjects made easy in this book include bank interest, discount, income on securities, payment on mortgages, insurance plans, etc.

ALGEBRA: This book makes algebra a live interesting subject. The author starts with simple problems from everyday life that can be solved by arithmetic and shows you how to apply algebraic methods.

Among other subjects, this book teaches you all about logarithms—the method of computation that engineers use to save time. It also shows you how to solve problems which are involved in all business and industrial work relating to machines, engines, ships, autos, planes, etc.

GEOMETRY: This book gives you the practical common-sense method for solving all problems in both plane and solid geometry — problems ranging from the simplest distance problems to the geometry of spheres which has applications ranging all the way from the atom to the earth itself.

Here you will find all the facts you need to deal with angles, triangles, circles, and the many other geometric figures that are basic to engineering design.

TRIGONOMETRY: Practically every problem in machine work, land surveying, mechanics, astronomy and navigation is solved by methods of trigonometry; and this interesting volume makes the methods of solving them clear and easy.

These methods are explained simply, with actual examples of calculations of height and distance as applied to meteorology, the determination of the position of a ship at sea, the construction of buildings, bridges and dams, the cutting of gears, etc. The great range of problems includes those arising in the work of the civil engineer, whether he is surveying land; laying out a road or railroad track, or merely "leveling off" a lawn or tennis court.

CALCULUS: This branch of mathematics deals with rate problems and, is essential in computation involving objects moving with varying rates of speed. It also enables us to find the most efficient design for any kind of mechanism, engine, or moving vehicle. The practical application of calculus forms much of the foundation for our present world of engineering and mechanics. In each chapter, author shows you, step by step, how to work out practical problems that occur in business and industry.

MAIL THIS COUPON

D. Van Nostrand Company, Inc., 250 Fourth Ave., New York 3, N. Y.

Send me MATHEMATICS FOR SELF STUDY in 5 volumes. Within 10 days I will either return the books or send you $1.85 as first payment and $2.00 per month for four months until the total price of $9.85, plus a few cents' postage, is paid.

(If you send remittance of $9.85 with this coupon, we will pay the postage. Same return privilege, refund guaranteed.)

Name .....
(Please print)

Address .....

City ..... Zone ..... State .....

Reference .....

Address .....

In Canada, Order From: D. VAN NOSTRAND COMPANY (CANADA) LTD.
25 Hollinger Road

AMG-3-55

SEND NO MONEY

Examine These Books for 10 Days FREE!

Send no money now. The coupon at left will bring you the 5 books for 10 days' trial. Look them over, spend some time with them and decide for yourself how useful these practical, simplified books will be to you. Unless you are convinced that they are exactly what you need and want, you may return the books to us and owe nothing; or you may keep them by sending us the small down payment of $1.85, balance in four monthly payments. Take advantage of this opportunity to acquire complete training in mathematics this simple, inexpensive way. Mail the coupon NOW.

D. VAN NOSTRAND COMPANY, INC.
Publishers Since 1848
250 Fourth Avenue, New York 3, N. Y.

Thousands of Jobs
Are Waiting for Trained Men

INDUSTRY is working at top capacity to meet the needs of our gigantic industrial program. Trained mechanics and technicians are in urgent demand, and in practically ALL OF THESE JOBS a knowledge of mathematics is required.

Remember, mathematics is the foundation of all technical work. Give yourself this basic preparation now by this quick, convenient, inexpensive method.

Amazing Offer for Readers of This Magazine

9 TIMES AREA MAGNIFICATION

This is what you see with the naked eye

This is what you see with the POWERHOUSE

Genuine COATED LENSES

FREE GENUINE LEATHER CASE!

This attractive case is made entirely of Supple-Soft genuine leather. Beautifully finished in a golden tan with harmonizing stitching and snap closure. Protects your **POWERHOUSE** binoculars against rain, dust, grime. Yours ABSOLUTELY FREE with your order for the new **POWERHOUSE** Binoculars with coated lenses!

SAVE $700

DIRECT FROM IMPORTER TO YOU

4.98 WITH LEATHER CASE • F.T.I.

SEE UP TO 20 MILES AWAY!

IMPORTED FROM GERMANY

Rush for FREE TRIAL!

THORESEN'S, Dept. 126-C-6
352 Fourth Avenue, New York 10, N. Y.

RUSH 1 POWERHOUSE with Leather case at 4.98, on 5 day FREE Trial—Money Back guarantee.

☐ 4.98 enclosed. Send all charges prepaid.
☐ Send C.O.D. plus postal charges.

Name.....

Address.....

Town.....State.....

CANADIANS: Save Tariff. Send orders to Thoresen Co., 45 St. James St., West, Dept. 126-C-6, Montreal 1, Que.

Lifetime bargain for sports fans! **THORESEN**—world's greatest importer of German binoculars—brings you famous, nationally advertised **POWERHOUSE** Binoculars at an unbelievably low price! **NOT** another crude model! **NOT** a toy! **NOT** 4 . . . 5 . . . 7 . . . but **9X AREA MAGNIFICATION!** It's the pride and joy of every red blooded hunter, fisherman, sports enthusiast! Thoresen and only Thoresen brings it direct to you for a mere 4.98.

TRIUMPH OF GERMAN OPTICAL INDUSTRY

The **POWERHOUSE** is made in West Germany—world's outstanding producers of quality optics—the finest Cameras, Telescopes, Microscopes and Binoculars. German know-how and superb workmanship are reflected in the many features of the famous **POWERHOUSE.** Here are a few: 1. Great Structural Strength without tiring weight. Only 9½ ounces in all! 2. Aluminum centre-post focusing gives you over 25 steady positions for sharp viewing. 3. Easy adjustment for close-apart or far-apart eyes. 4. Crisp, modern design gives you easy, firm grip. 5. New streamlined model as illustrated in reduced size above. 6. Jumbo center wheel gives effortless focusing. 7. High luminosity gives you viewing even in moonlight.

3X,40 Coated, Precision-Ground Lenses for Super Viewing

The powerful lenses are the crowning achievement of the 99-year-old firm. Far different, indeed, from the molded plastic kind stamped out by the million. Each objective lens is coated and polished to high tolerances, then checked for accuracy. This takes much longer, costs 20 to 30 times more! But it's worth it! You get **CRYSTAL-CLEAR** viewing. Your eyes don't suffer the strain of excessive distortion and ghost images so common in cheap binoculars. Were you to spend $25.00, we could not give you better quality lenses!

Magic of American Dollar Makes This Value Possible

In less than 18 months **THORESEN** has sold close to 500,000 binoculars—making it the greatest importer of German binoculars in the world! This immense volume, plus the magic of the American dollar enables us to buy at far less—sell for less! Get your **POWERHOUSE** now at our low introductory price of 4.98, tax paid, including handsome leather carrying case.

SEEING IS BELIEVING! Try Powerhouse at OUR risk!

One look thru the **POWERHOUSE** will convince you of its superb quality. That's why we want to send one to you on **FREE TRIAL** for 5 days. Use it on hunting or fishing trips. Use it at races—on trips—for bird watching. Always have a ringside seat at boxing matches! Then—if you don't think this is the **GREATEST** binocular value of the last 10 years, return it for full refund—no questions asked!

LIMITED OFFER! Order at once

Only about 100,000 **POWERHOUSES** can be produced this year, due to the high manufacturing standards. To be fair to all, we are forced to place a limit of **ONE** binocular per reader. Send coupon today to ensure yours!

THORESEN'S
352 Fourth Avenue, Dept. 126-C-6, New York 10, N. Y.
CANADIANS: Order direct from our Montreal plant: **THORESEN CO.,** 45 St. James St., West, Dept. 126-C-6, Montreal 1, Que. Same price and guarantee. (No extra for Tariff.)

The Run-Away Bride who stumbled on a Shocking Secret!

Panting, bruised, terrified, Caroline Emmett staggered into our house tonight, pleading for help. The pretty stranger told us a fearful story of a murder she had seen on the foggy mountainside. She claimed that the murderer had chased her to our very door!

We took her in for the night. I notified the police, but they can't find any corpse, and they are skeptical of her story.

Some of our family wondered if she was telling the truth—until a heavy rock crashed through the bedroom window, narrowly missing her head. Caroline is sure that the killer lurks outside, waiting for her in the darkness. And our car has been *deliberately damaged.* Caroline is marooned here for the night . . .

Despite her fears, she is grateful for our shelter. She trusts us. In our brightly lighted home, she feels perfectly safe. *But she isn't. . .*

I know. Because *I am the murderer who must kill her before morning!*

* * * * * *

What a story! Through twelve hours of unbearable suspense THE DEADLY CLIMATE, by Ursula Curtiss, carries you from one nerve-shattering climax to another. This unusual novel sells for $2.75 in the publisher's edition—but it's just ONE of the SEVEN top new mysteries you get for ONLY $1.00 on this offer!

ALL 7 TOP NEW MYSTERIES for only $1.00 WITH MEMBERSHIP

IN ADDITION TO "THE DEADLY CLIMATE" YOU ALSO GET THESE SIX NEW MYSTERY NOVELS

THE BLACK MOUNTAIN

by Rex Stout

Carla's search for a murderer ended in a Communist torture dungeon! But her captors didn't know that Carla's father was Nero Wolfe—and that the "armchair" detective's rescue invasion would rock the entire Soviet Union! *Pub. ed. $2.75.*

THE BIG MONEY

by Harold Q. Masur

A stranger had taken over my office, my secretary *and my name!* Now there were TWO of me—but I couldn't stop to ask why. Because, pretty soon, unless I could dodge bullets, there wouldn't even be *one! Pub. ed. $2.50.*

A KEY TO DEATH

by The Lockridges

Pam North lifted the phone and heard her friend scream. "Pam *you've got to help me!*" Then the line went dead—and Pam and Jerry North plunged headlong into the kind of trouble which you leave FEET FIRST! *Pub. ed. $2.50.*

DEATH AT THE ISTHMUS

by George Harmon Coxe

Jim flew to Panama to find his friend Max—and found *himself* hunted, by the cops, the underworld, and three dangerous women! Max had been murdered—and one of the girls knew why. But SHE had a gun that would talk before she did! *Pub. ed. $2.75.*

THE GLASS VILLAGE

by Ellery Queen

Old "Aunt Fanny" Adams was famous for her paintings of peaceful New England life. Then she was MURDERED—and the shocking truth about her "quaint" small-town neighbors was finally revealed! Ellery Queen's most challenging mystery, his finest novel. *Pub. ed. $3.50.*

MY SON, THE MURDERER

by Patrick Quentin

The middle-aged bridegroom had been Jack Duluth's best friend, but Jack had an even stronger reason for hunting down his killer. Because the bride's young lover scheduled to burn for the murder . . . was Jack Duluth's own SON! *Pub. ed. $2.50.*

Get all SEVEN—Mail this coupon NOW!

THE DOLLAR MYSTERY GUILD
Dept. AMG-3, Garden City, N. Y.

Please enroll me in the Dollar Mystery Guild and rush me these new books worth $19.25 in publishers' editions. Later, I'll send only $1.00 (plus shipping) for the entire package.

MEMBERSHIP BONUS—7 FULL-SIZED BOOKS for $1.00

THE DEADLY CLIMATE. THE BLACK MOUNTAIN. THE BIG MONEY. A KEY TO DEATH. DEATH AT THE ISTHMUS. THE GLASS VILLAGE. MY SON, THE MURDERER

New book bargains will be described to me each month in the Club's advance bulletin, "Mystery Guild Clues." The purchase of additional selections at only $1.00 each (plus few cents for shipping) is entirely voluntary on my part. Whenever I don't want a book I will notify you, and it won't be sent. I need take only four selections a year—and I may resign any time after accepting four selections. **NO-RISK GUARANTEE: If not delighted, I can return books in 7 days and membership will be cancelled.**

Name .....
(Please Print)

Street and No. .....

City ..... Zone..... State.....

(Same offer in Canada: Address Dollar Mystery Guild, 105 Bond Street, Toronto 2, Ont. Good only in U.S.A. and Canada.)

DOLLAR MYSTERY GUILD MEMBERSHIP GIVES YOU THE RELAXATION YOU DESERVE

Just imagine getting ALL these latest books by top mystery authors for just a dollar. They're worth $19.25 in publishers' editions, but you can have all seven in one giant package if you join the Mystery Guild on this amazing offer. The club's plan is simple and popular: Each month the editorial board selects two top-notch new books—often by authors like Rex Stout, Ellery Queen and Agatha Christie. These are described to members well IN ADVANCE. You take only those you like; no more than four a year if you wish. If you don't want a book, simply tell the Club. It will not be sent. You pay postman nothing; bills are due only after you examine your selections. These latest novels cost $2.50 to $3.50 in the publishers' editions. *But members pay only ONE DOLLAR each (plus a few cents for shipping) for their hard bound, large-sized volumes.* You build a fine library almost for pennies.

No wonder so many people consider Dollar Mystery Guild membership the greatest value in the world of books. Best of all, if you join NOW, you get SEVEN new books for ONE DOLLAR as a membership bonus! Don't miss this opportunity. Send the coupon today to DOLLAR MYSTERY GUILD, Dept. AMG-3, Garden City, N. Y.